

670	27364	92836	09428	61208	74982	36498	32764	81276	01
4986	40932	70987	32123	49817	26346	81287	65491	87364	81
721	75654	55656	12737	72727	72727	91918	63473	67867	70
6723	87629	37677	32612	53498	71296	28756	18276	98716	87
7269	76329	74698	76857	98670	27601	56701	57601	73648	15
591	87364	87265	96710	27630	12673	84769	28743	98127	50
658	63298	75698	27465	87326	49876	28376	81273	98615	62
667	87432	74328	78674	29867	32867	67867	86786	43286	432
667	68768	68763	34234	34238	68768	62342	48273	48768	234
936	98432	32432	86743	43286	43286	43286	43286	43286	432
743	86743	86743	39867	32867	86743	43286	43286	43243	867
741	86743	86743	86743	86743	86743	86743	86743	86743	435
543	98798	98754	98754	98754	98754	29867	67543	67986	867
676	87698	69876	87698	69876	87612	12341	34867	86798	632
867	43298	65656	56756	56123	32143	14321	32143	14321	321
751	02787	58765	76587	58765	76587	58765	76587	58756	765
75476	76543	54365	36543	54365	36543	54365	36543	54365	543

Numbers & Oddities

a.k.a. The Spooks Newsletter

Edition #215, August 2015

Editor: Ary Boender email: udxf@udxf.nl

Numbers & Oddities <http://www.numbersoddities.nl>

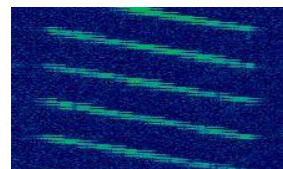
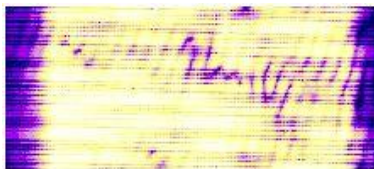
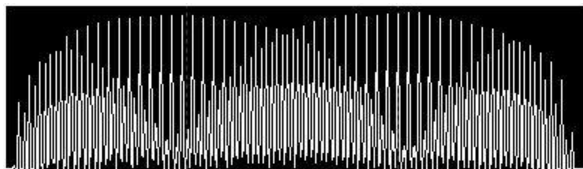
"Numbers & Oddities" a.k.a. the "Spooks Newsletter" is a newsletter for the members of the Utility DXers Forum (UDXF), the Spooks mailing list, HF Underground and everyone else who is interested in Numbers Stations.

"Numbers & Oddities" covers the fascinating world of Numbers Stations and other odd radio signals on shortwave.

Hi and welcome to yet another edition of "Numbers & Oddities"; #215 to be precise.

What has happened in August? The Polish intelligence stations (E11 family) returned to their old behavior and the new marker that popped up on 4525 kHz in late July is still there. There was some traffic too. M51 and UM01 (the CQ station) have not yet returned and the 10-minutes station added several new callsigns and frequencies to the list.

The conditions were not very good for a good part of the month, partly due to thunderstorms and other weather related Interference; and the very annoying radars were raping the HF as usual, spoiling a lot of fun. I really hate them !!!



I copied special event station SN1ENIGMA on 15-08 at 1053 UTC on 7149 kHz LSB commemorating cryptologist Marian Rejewski, known for his work on the ENIGMA machines. See further https://en.wikipedia.org/wiki/Marian_Rejewski

Memory Lane

I stumbled over an article about "Swan Island, its radio history, including the CIA and the revenge of United Fruit" by Bartholomew Lee. Always interesting. <http://www.californiahistoricalradio.com/CHRSPix/BartLeeSwan.pdf>

Clandestine Radio stations

Since I started UDXF in 2006 I regularly receive questions about Clandestine stations. As I said before I would love to include them in N&O but I simply do not have time to listen to them and search for these stations. I think that they would fit in nicely in N&O. So if someone wants to write an item about clandestines every now and then or if you want to share your logs of these stations, please contact me.

A good place for schedules is MT-Shortwave Blogspot <http://mt-shortwave.blogspot.nl/search/label/Clandestine>

VOICE STATIONS



E06

13540 kHz, 21-08, 0500 UTC

16115 kHz, 06-08/07-08/20-08/21-08, 0600 UTC

210 897 105

75764 60181 58684 79256 59279 94563 93621 61118 79690 03192

25013 36179 29787 49023 37837 53308 53790 27548 56495 44244

34111 44348 51544 50037 92269 63453 00243 17493 39920 06190

99526 57842 40901 05201 54878 84792 70262 43335 93496 74162

81205 32080 75235 12296 15865 09235 99717 25420 20882 60515

33095 07155 53694 94765 02863 86357 90488 27473 34181 02478

71755 52267 26141 80628 46370 05104 91401 23543 00153 50804

07656 62626 79836 46646 54338 35260 48386 62697 33030 80577

32597 63569 94993 70876 48917 81291 24269 20870 18436 33977

49779 41945 06962 69984 84875 33645 51143 42251 17759 29530

56554 42494 01223 39632 78696

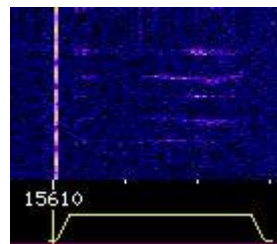
897 105 00000

15615/14753 kHz, 22-08, 1100/1200 UTC

15610/14753 kHz, 23-08, 1100/1210 UTC

832 745 206

08897 84495 53164 24298 17536 83311 82567 86071 27438 94690
04740 42438 01172 44117 50453 87832 72862 36568 54794 58622
35502 35704 53967 65201 16174 46087 29234 76107 50953 35285
38669 65372 03223 48731 06972 61573 43485 96514 02229 66967
31134 15472 25824 81363 42962 88241 24982 90145 82106 12798
74915 59564 36588 36109 09954 84578 36162 65831 32885 13965
92255 32131 93530 84136 24764 57647 30756 44707 78803 06079
21034 30843 97459 01876 40344 96975 02380 68508 99337 95704
84089 10915 62606 36665 61233 74104 96351 26458 12956 92134
91237 36818 97711 52670 19723 93280 93791 73690 58602 18796
90180 77213 94953 90843 09512 94469 18497 82956 97390 56273
10850 61524 66115 96206 00760 08454 25585 11012 67782 48231
82267 97405 92219 53146 45038 59309 09406 38405 42553 54506
66546 86318 60747 74639 67042 03291 66183 14034 44087 63513
37195 55663 93834 28678 74108 23405 97358 92612 25415 41690
71486 42153 07210 95237 34298 87682 36548 74794 03594 46477
84568 51725 00641 13631 35028 70992 82018 30126 02676 40796
82751 05634 90322 71282 11646 11501 06551 57659 44046 92463
24570 61981 17372 69480 86115 49554 62115 12121 13069 66311
34469 62284 14120 81079 79399 44352 51461 21931 98480 42120
88011 65568 82949 30861 39519 07916
745 206 00000



Note: E06 was sent instead of the usual M42d schedules on 22 and 23-08. On 23-08 15610 kHz was used instead of the usual 15615 kHz. The carrier started on 15615 kHz but moved after ca 15 minutes to 15610 kHz.



E07

13881/12181/10881 kHz, 02-08, 1700/1720/1740 UTC

818 1 348 108

66741 66618 89990 86307 94288 65461 75124 88533 57621 75522
48548 17092 52555 21849 03037 57491 62236 69635 64724 47335
04135 70970 56997 82185 97889 10167 85718 87530 59945 38676
58371 15721 96042 99488 59442 33959 51134 95098 92406 90816
16281 91996 11036 65254 17918 10253 73584 93340 76356 00079
35658 61494 03603 22678 91190 32725 97779 82746 23858 46586
17293 10433 47139 74394 44534 72802 38098 61569 89935 11690
12380 48689 32805 75672 59895 98537 22265 99477 00116 90269
96844 74289 30944 14588 70609 31259 73232 37744 84341 08899
22289 06310 90191 78714 10651 89494 42660 77113 97328 82852
27440 69226 90382 80759 99580 47733 83843 26061
000 000

14378/13458/10958 kHz, 03-08/05-08, 1900/1920/1940 UTC

349 1 160 45

21759 12282 13604 68600 28641 61283 93149 20027 99467 49458
70087 49977 41307 29393 42260 97273 46982 96007 33571 58618
70657 64578 56195 53479 08497 36142 12718 85621 38439 95704
59369 16291 07636 27060 43626 99504 79571 42492 72961 83506
11891 39864 23150 37029 37412
000 000

9064/10264/11464 kHz, 05-08/08-08, 0600/0620/0640 UTC

024 1 712 57

05453 37620 48558 28480 76158 65164 38143 39895 65249 43298
75013 80196 90896 29085 90399 48475 15601 40300 68994 35524
06473 93903 82322 47351 93891 80382 43832 58946 46626 80061
86330 91578 97825 36078 76861 85100 52627 26991 21169 20777
15505 95010 94701 81362 59036 92045 10657 63013 29872 60095
84416 68961 54581 66593 64196 00276 55603
000 000

9064/10264/11464 kHz, 19-08/22-08, 0600/0620/0640 UTC

024 1 686 80 686 80

07945 06769 41616 89653 69526 29439 10474 11516 75967 20975
38885 50309 31310 16170 11949 49681 70270 39460 24639 44289
43556 86139 42870 00075 81715 99966 58732 27612 01208 68759
41796 31920 15231 32898 05507 98616 12428 32028 38396 72431
59604 04822 39198 92796 91864 71904 10235 38764 04677 74469
19804 83782 71207 63940 12717 38322 63601 30379 30934 72020
40178 14358 43443 41611 73683 03558 20668 13528 25387 91174
86762 33018 66572 36875 32706 41364 10865 27001 64039 26945
000 000

14378/13458/10958 kHz, 24-08/31-08, 1900/1920/1940 UTC

349 1 826 36

73972 05474 88375 47097 65578 39212 60217 70129 84820 20101
30515 87032 51010 93270 31323 85139 96733 65875 64221 38966
84374 83243 50968 11929 57952 55898 13911 31641 09751 06835
96413 16066 97657 59971 82383 25779
000 000



E07a

12166/10766/9266 kHz, 19-08, 2000/2020/2040 UTC

172 1 16966 9592 68

72821 86705 37860 33093 16794 49661 24618 00452 89903 75882
62851 26264 61105 63829 59914 08012 78207 44121 52360 15940
79253 69785 37210 05322 71431 95669 69026 69727 28573 95672
37692 37398 80533 68739 02245 42857 12491 82775 62821 18583
79000 93685 09874 43666 06098 38513 01322 29576 84995 67653
35850 99674 03680 56208 94216 22217 75983 29214 48122 25864
07011 18240 67100 83159 77313 25012 91413 16081
000 000

7933/9133/10233 kHz, 20-08, 0430/0450/0510 UTC

912 1 16966 9592 68

72821 86705 37860 33093 16794 49661 24618 00452 89903 75882
62851 26264 61105 63829 59914 08012 78207 44121 52360 15940
79253 69785 37210 05322 71431 95669 69026 69727 28573 95672
37692 37398 80533 68739 02245 42857 12491 82775 62821 18583
79000 93685 09874 43666 06098 38513 01322 29576 84995 67653
35850 99674 03680 56208 94216 22217 75983 29214 48122 25864
07011 18240 67100 83159 77313 25012 91413 16081
000 000

12213/11413/10113 kHz, 21-08, 1510/1530/1550 UTC

241 1 62320 722 77

92622 35880 97326 35030 37284 29256 23121 40989 27339 38378
20252 71057 85022 66838 16449 10387 69567 70884 33230 59660
36094 51857 14633 46264 38622 22730 94619 05161 79435 29623
92186 84912 22207 25991 80266 94784 45173 27794 65131 45201
21169 69992 22974 28443 43477 45891 84153 31769 31985 89175
78941 75937 78614 69024 91284 02832 67812 70219 66126 83291
75707 68315 02177 51854 96748 16092 87885 67918 36702 08112
89732 51646 05933 22412 47077 36033 53926

000 000

12177/13477/14877 kHz, 22-08, 0800/0820/0840 UTC

148 1 62320 722 77

92622 35880 97326 35030 37284 29256 23121 40989 27339 38378
20252 71057 85022 66838 16449 10387 69567 70884 33230 59660
36094 51857 14633 46264 38622 22730 94619 05161 79435 29623
92186 84912 22207 25991 80266 94784 45173 27794 65131 45201
21169 69992 22974 28443 43477 45891 84153 31769 31985 89175
78941 75937 78614 69024 91284 02832 67812 70219 66126 83291
75707 68315 02177 51854 96748 16092 87885 67918 36702 08112
89732 51646 05933 22412 47077 36033 53926

000 000

12166/10766/9266 kHz, 26-08, 2000/2020/2040 UTC

172 1 39299 7441 77

72395 82788 34250 41106 46785 31305 67925 98609 25034 65002
11921 63299 11748 10676 54691 55848 35942 43279 84147 61727
92069 46443 72673 97848 97549 04780 49873 96657 88096 70611
86986 92808 21032 32802 30154 44267 02826 71481 70880 35407
81368 96667 72152 27032 30480 17851 63365 44434 72883 85308
89027 27028 30933 16858 99533 89927 06586 86509 11510 43089
34439 77822 45346 62214 20979 45693 56439 56188 00946 92953
77007 46902 87973 27840 74563 97259 33102

000 000



E11/ E11a

13722 kHz, 01-08, 1400 UTC

986/10 Attention 54450 27547 17195 72439 59466 34091 89940 59970 93066 32022 Attention, rpt msg, out

14769 kHz, 04-08, 0530 UTC

982/10 Attention 60628 97628 11494 85476 25787 35075 99839 09377 74792 59202 Attention, rpt msg, out

13722 kHz, 04-08, 1400 UTC

985/10 Attention 09392 56038 57903 54055 36996 81051 22370 67780 36739 31328 Attention, rpt msg, out

14769 kHz, 08-08, 0530 UTC

982/10 Attention 42050 27284 93420 69918 95306 13419 72105 11559 85786 29940 Attention, rpt msg, out

14518 kHz, 08-08, 1810 UTC

984/10 Attention 05065 18993 40748 07541 97878 84437 11172 03506 53686 09392 Attention, rpt msg, out

13722 kHz, 11-08, 1400 UTC

988/10 Attention 62418 04354 70385 35403 07656 77080 96203 00149 43441 80147 Attention, rpt msg, out

14518 kHz, 11-08, 1810 UTC

986/10 Attention 70017 33181 01180 87606 14236 97929 11964 82041 07924 73076 Attention, rpt msg, out

13722 kHz, 15-08, 1400 UTC

981/10 Attention 33949 81483 62042 50725 94485 19839 43356 96124 02883 57403 Attention, rpt msg, out

13722 kHz, 18-08, 1400 UTC

988/10 Attention 68687 91406 83052 92377 62604 08790 56365 90314 62394 31214 Attention, rpt msg, out

13722 kHz, 22-08, 1400 UTC

982/10 Attention 99023 19594 11118 85157 65157 89072 75388 94896 72327 24088 Attention, rpt msg, out

14518 kHz, 22-08, 1810 UTC

983/10 Attention 77960 03335 08867 67425 13282 92478 98007 43275 66423 57006 Attention, rpt msg, out

14518 kHz, 25-08, 1810 UTC

983/10 Attention 50492 81764 80884 11672 22179 32525 69830 63092 90255 03309 Attention, rpt msg, out

9150 kHz, 03-08/06-08, 0820 UTC

430/30 Attention

00206 86752 18870 25532 77951 88671 52543 65209 46642 05495

97971 87990 23264 13108 07608 75031 98378 66141 49495 11049

32376 30674 09177 87507 62210 39839 71295 48953 47728 31398

Attention, rpt msg, out

13427 kHz, 03-08/05-08, 0900 UTC

534/35 Attention

55959 81584 47886 62716 42036 07345 19425 62587 44163 73418

66521 16753 93624 85393 36504 33112 03883 66145 80674 65630

74502 91596 57114 85825 41865 03514 14665 73942 05073 37588

75915 15655 65732 60750 15470

Attention, rpt msg, out

10487 kHz, 03-08, 1710 UTC

957/26 Attention

83829 63988 54429 74821 16797 31407 67978 32757 75679 34768

72511 73592 23365 44745 36342 34236 56380 23985 56333 20857

32941 72529 00248 89752 79340 97255

Attention, rpt msg, out

14753 kHz, 04-08/07-08, 0710 UTC

637/34 Attention

14496 26705 85211 21979 01011 02686 45412 91396 55792 46020

75680 83965 53034 10465 11337 09620 00160 70517 87341 02532

09412 86339 15598 19847 82192 78531 70029 42334 21066 83707

84394 27098 04736 36422

Attention, rpt msg, out

13424 kHz, 05-08/07-08, 0545 UTC

349/31 Attention

54749 04730 33703 71939 51847 49025 44272 70478 15577 80954

58918 57794 80961 15219 15808 14882 64952 22441 58813 64954

00578 69120 88509 72538 13112 89113 94222 21438 17688 49051

25984

Attention, rpt msg, out

10487 kHz, 07-08, 1710 UTC

959/23 Attention

60627 09991 59482 76517 59398 39465 93528 74229 71426 44825
53298 08304 31249 38867 51754 86685 78927 43055 83921 40360
29249 51559 78134

Attention, rpt msg, out

9610 kHz, 09-08, 0745 UTC

262/32 Attention

76694 88667 51238 04751 10313 10230 96257 11674 98007 02597
34746 38930 18555 33535 24492 01908 37652 08164 20627 32502
13023 54929 90187 63802 58376 95014 52366 88148 39041 23982
87080 48088

Attention, rpt msg, out

13873 kHz, 11-08, 1045 UTC / 8530 kHz, 14-08, 2000 UTC

577/33 Attention

71111 20604 99421 48585 97476 09935 28962 32691 78869 95689
28888 65881 29032 64105 13743 68433 65846 30405 83085 81317
11939 91850 08596 94015 24167 33969 27208 08465 81056 54990
42656 20646 97833

Attention, rpt msg, out

11581 kHz, 11-08, 1925 UTC

552/38 Attention

71493 37824 77204 95739 94550 27445 09506 10047 34778 20540
40218 65373 20249 90055 41167 13611 51640 53565 48410 34529
71550 97515 67088 02256 64930 94549 39372 29636 73050 22207
03015 37853 22244 23158 17321 83191 39145 29555

Attention, rpt msg, out

14965 kHz, 12-08, 1705 UTC

392/37 Attention

09077 53350 82102 50351 77672 97102 80193 63369 24965 83446
70591 04458 90514 48458 85462 16498 48042 05237 05427 51385
50292 82584 78775 33056 28720 01921 93564 71097 45011 21204
74310 64247 24445 07020 17569 58085 14282

Attention, rpt mg, out

10213 kHz, 13-08, 0930 UTC

278/31 Attention

50539 19005 63796 18569 53229 96713 46432 32329 27358 13452
87205 25329 68914 67310 05682 94890 74597 58416 91573 98799
40020 89237 71021 52045 45311 93184 12002 46209 63043 62911
90357 Attention, rpt msg, out

16388 kHz, 14-08, 1110 UTC

958/34 Attention

12122 79965 42322 22318 82634 88679 84710 62278 40212 98853
90109 90054 63602 22034 79050 87914 84163 09156 47415 66145
24446 78163 41841 17869 45325 74764 31544 25450 51805 59331
51181 39618 06335 46197

Attention, rpt msg, out

10487 kHz, 14-08, 1710 UTC

959/28 Attention

91767 73908 59071 04477 30970 91095 27536 09657 31219 21879
49844 41682 83566 56413 03266 81818 72423 31880 98328 76485
02895 38554 97350 53947 60830 24550 43636 41745

attention, rpt msg, out

12924 kHz, 17-08/21-08, 0830 UTC

646/37 Attention

91150 73428 97019 98243 03134 36601 08823 10935 54775 64834
93756 93525 67819 85939 85238 42792 59636 25878 08816 46044
41921 95630 45805 16440 98154 13377 76927 11858 28792 92532
55356 36200 80186 19510 77087 96523 05898

Attention, rpt msg, out

10302 kHz, 18-08, 1045 UTC

460/35 Attention

92146 56345 21451 72452 18868 85581 81384 43548 74991 80072
40170 20716 37950 66477 65876 02160 72926 50149 51574 79563
24468 17060 54625 87064 37947 81431 25691 52511 23463 24481
64377 13441 11226 06258 98302

Attention, rpt msg, out

15803 kHz, 19-08, 1300 UTC

131/30 Attention

61414 38679 62040 74889 76177 11783 91492 87206 81813 70990
40497 72861 59371 87191 16289 83685 58924 50834 52048 48770
35544 66274 92432 52655 07554 43063 25611 62496 51435 67268

Attention, rpt msg, out

10587 kHz, 21-08, 1710 UTC

953/20 Attention

32979 93479 88128 17413 59228 84141 26704 74854 17095 58942
84771 22468 53738 93556 61499 60544 16792 66885 79225 52911

Attention, rpt msg, out

13424 kHz, 25-08, 0645 UTC

518/30 Attention

51154 02665 14706 79658 38557 88632 66526 50629 42932 68310
12569 87791 82183 55927 78491 04668 70343 19683 71559 32050
91201 31948 35438 69985 70006 09962 32334 02731 49952 28500

Attention, rpt msg, out



E17z

16780/12850 kHz, 06-08, 0800/0810 UTC

674 918 5 35444 81434 39706 31728 46049 918 5 00000

16780/12850 kHz, 13-08, 0800/0810 UTC

674 918 5 35444 81434 39706 31728 46049 918 5 00000



G06

6887 kHz, 13-08/27-08, 1829 UTC

842 317 317 20 20

37839 35787 98273 60187 16202 95625 31691 52538 61025 22567

93296 67423 40968 16891 63781 34820 04842 60491 75924 04594

317 317 20 20 00000

5943 kHz, 14-08/28-08, 1930 UTC

218 394 20

06132 75514 79681 94617 21443 31441 81797 17512 62689 33103

48930 93432 25709 93628 48683 18829 85052 49870 63962 04884

394 20 00000



S06

16327/13875 kHz, 07-08, 0830/0930 UTC

842 160 39

49626 64103 28778 75128 29000 31912 81099 93567 97097 42272

27341 94781 86763 00831 77503 87192 75491 60086 29642 72948

31525 84111 90931 60950 99724 62948 12363 74812 22385 56500

76895 72112 01535 76522 44117 12383 34736 38779 22915

160 39 00000

16327/13875 kHz, 14-08, 0830/0930 UTC

842 359 40

82229 29778 33149 06292 16692 10794 46790 84331 42355 40038

52580 12571 27590 41410 07589 74789 32187 82197 39125 17393

25293 89507 35676 15532 52759 50711 01331 41008 51977 01181

21950 59891 41533 51209 75607 94081 85371 86898 85857 91468

359 40 00000



S11a

5149 kHz, 07-08, 0455 UTC

320/31 Vnimanie

14079 94509 96651 39316 43150 05105 32234 15204 75582 18913

83325 28385 00157 41224 95230 04369 48726 58816 93690 01143

85036 38292 99797 58945 04212 73073 03582 33854 95694 13408

14351

Vnimanie, spr msg, out

16530 kHz, 17-08, 1015 UTC

476/37 Vnimanie

83775 82400 84010 46462 23307 47741 04175 19686 91756 26159
23173 31421 36042 35801 34716 05664 54889 25612 92830 21555
67898 21584 58674 56669 99438 49833 37993 30270 42025 19974
76548 17442 99767 45244 65633 18391 65280

Vnimanie, spr msg, out

11581 kHz, 28-08, 1020 UTC

420/34 Vnimanie

19762 85743 31755 52673 87886 21530 20770 26899 63148 07242
20877 47653 06477 27476 62363 28722 58713 95815 51872 15726
00463 51422 80255 20542 94608 13901 99687 47605 73020 56873
07979 20918 18450 96745

Vnimanie, rpt msg, out



S28 - The Buzzer

Mode: USB

Frequency: 3216 & 4625 kHz

03-08, 1350 UTC	MDZhB 18 584 OZONID 7650 2887
03-08, 1252 UTC	MDZhB 75 544 SDANNYJ 4521 0065
03-08, 0956 UTC	MDZhB 65 274 UDAR 7228 4685
03-08, 0934 UTC	MDZhB 08 475 ADYeONOMA 8350 7084
06-08, 0644 UTC	MDZhB 66 923 EGRIDIF 8022 7322
10-08, 2140 UTC	Music transmitted over the buzzer's signal by a pirate station
11-08, 2140 UTC	Pirate morse on top of the buzzer "PUTIN A DICK"
12-08, 0803 UTC	MDZhB 53 681 BOTVYeT 9802 4789
12-08, 0748 UTC	MDZhB 31 055 KOTINAZIN 3994 9236
12-08, 0644 UTC	MDZhB 14 874 SOUChASTIYe 0250 9533
13-08, 1024 UTC	MDZhB 32 850 UGLYeRODNYJ 1187 2569
13-08, 1113 UTC	MDZhB 19 983 AGYeNTURNYJ 8859 5814
17-08, 0804 UTC	MDZhB 12 889 YaGYeL' 6870 5676
17-08, 0806 UTC	MDZhB 11 003 YeGYeLON 1811 2814
18-08, 1356 UTC	1 2 3 4 5 6 7 8 9 0 Test count on top of the marker
20-08, 0818 UTC	MDZhB 50 931 AGATU 6688 4832
23-08, 0741 UTC	MDZhB 17 650 OVChYeTINA 9473 7781
24-08, 1103 UTC	MDZhB 76 548 AVTONOMNYJ 7619 7776
24-08, 0806 UTC	MDZhB 58 651 DVUKRAN 8851 8222
27-08, 1122 UTC	MDZhB 81 494 YeVGYeNIYa 9131 7265
27-08, 0952 UTC	MDZhB 76 518 AVTOKOD 1513 2401
29-08, 0601 UTC	MDZhB CYeNTIM 61 51
30-08, 1551 UTC	MDZhB 36 787 DVOROVYJ 8657 9323
31-08, 0559 UTC	MDZhB PYeNSION 31 34



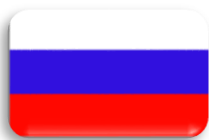
S30 - The Pip

Modes: CW (Pip), USB (messages)

Frequencies: 3756 kHz (night), 5448 kHz (day)

5448 kHz, 04-08, 1533 UTC 8S1Shch weather warnings: 8S1Shch V period s 4 po 5 po territorii Karachayevo-Cherkesii, respu-
bliki Kabardino-Balkarii ozhidayutsya sil'nyye grozovyye dozhdii so shkvalistym usileniyem vetra do 20 m/s, pod'yem urovnya
vody do neblagopriyatnykh otmetok, v gorakh skhod seley v malykh ob'yemakh (In the period from 4 to 5 heavy thunderstorms
are expected in the region Karachai-Cherkessia, Kabardino-Balkaria Republic, with wind squalls up to 20 m/s, raising the water
level to unfavorable heights in the mountains flows.)

3756 kHz, 05-08, 1819 UTC	LI27 V2MZ SB7Z 'O6P Y8MV 6I2Zh 8CSchch' 27Shch' N1DU 53OB
3756 kHz, 06-08, 1818 UTC	INNC ShchGJP TZLM FY5E F61N 37CN MUDR 7VNSchch Zh7NZh YMA5
5448 kHz, 06-08, 1607 UTC	CI9V ZhSK4 HZ5T 5FSSchch 8MUO TUZR 5J7Shch DMC3 49FT C2ZA
3756 kHz, 09-08, 1850 UTC	M7KS PMV5 L'GJ KZI' TShchShchS VKY1 HCLF 61HZh ZBIL L7O5
5448 kHz, 13-08, 1705 UTC	'U1B OSOG BO6C F56Shch 9GSA ZhBZI 4RVZ 3VS' DKJ1 ZhD9V
5448 kHz, 13-08, 1559 UTC	8S1Shch SOLYeVARKA 60 54
5448 kHz, 14-08, 1559 UTC	8S1Shch SOLYeVARKA 60 54
3756 kHz, 22-08, 1736 UTC	Zh7NZh YMA5 VTH3 AGDT 'U1B OSOG BO6C F56Shch 9GSA ZhBZU
3756 kHz, 29-08, 1854 UTC	DKJ1 ZhD9V 42BV 81BR M7KS PMV5 L'GJ KZI' TShchShchS VKY1



S32 - Squeaky Wheel

Mode: USB

Frequencies: 3838 kHz (night), 5473 kHz (day)

3828 kHz, 05-08, 1928 UTC	AL'FA-45 37 961 RAMANUT 4502 6910
3828 kHz, 05-08, 1932 UTC	AL'FA-45 31 578 IRKA 0559 4438
3828 kHz, 05-08, 1936 UTC	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39 error in reading
3828 kHz, 05-08, 2027 UTC	AL'FA-45 73 670 ANALOJ 5209 2777
3828 kHz, 06-08, 1848 UTC	RUZh'E-26 DUBLYoR-68 KOVBOJ-39 STOROZh-62 NYeVKA-26 UTYoS-94 FONTAN-34 KURGAN-40 with PIP (S30) on background
3828 kHz, 06-08, 2049 UTC	ALEUT-09 LANDYSh-74 KOVBOJ-39 DZhIGIT-46 PYeNZhA-07 BIZON-64 PYeSOChNYJ-21 KARTA-11
5473 kHz, 06-08, 1734 UTC	AL'FA-45 KIRCHIK 65 34
7009 kHz, 06-08, 1121 UTC	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 Mic is not feeling well
7009 kHz, 08-08, 1613 UTC	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39
7009 kHz, 08-08, 1732 UTC	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34
7009 kHz, 08-08, 1909 UTC	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 KURGAN-40 DUBLYoR-68 STUPA-32 with PIP (S30) on background
7009 kHz, 09-08, 0823 UTC	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34 KURGAN-40 DUBLYoR-68 STUPA-32
7009 kHz, 09-08, 1241 UTC	AL'FA-45 22 618 KABYeL'ShchIK 6997 6873 with PIP (S30) on background
7009 kHz, 09-08, 1300 UTC	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 with PIP (S30) on background
7009 kHz, 09-08, 1349 UTC	AL'FA-45 70 254 DYELIMIN 3503 6561 with PIP (S30) on background
7009 kHz, 10-08, 1144 UTC	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 KURGAN-40 DUBLYoR-68 STUPA-32
7009 kHz, 10-08, 1533 UTC	AL'FA-45 86 748 MIRCYeN 4682 5215
7009 kHz, 10-08, 1607 UTC	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39
7009 kHz, 10-08, 1819 UTC	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34
7009 kHz, 12-08, 0641 UTC	AL'FA-45 15 188 67 178 MYeIDUNIZM 5976 5810 MUZIChaR 6414 3685. Pip (S30) in background with callsign 8S1Shch
7009 kHz, 12-08, 0746 UTC	AL'FA-45 12 297 TYeVONDA 9687 0668 with PIP (S30) on background
7009 kHz, 12-08, 0801 UTC	AL'FA-45 79 335 IRONICHAN 5976 5810 with PIP (S30) on background
7009 kHz, 12-08, 0803 UTC	AL'FA-45 26 260 CIMINAL' 6414 3683 with PIP (S30) on background
7009 kHz, 12-08, 0844 UTC	AL'FA-45 87 238 13 065 POZITIVNYJ 7510 4372 YeNOLAZA 0277 8891. S30 in the background
7009 kHz, 12-08, 0903 UTC	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39 KURGAN-40 DUBLYoR-68 STUPA-32. S30 in the background
7009 kHz, 13-08, 1602 UTC	AL'FA-45 ANALGYeZlYa 48 54
7009 kHz, 13-08, 1808 UTC	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34
7009 kHz, 14-08, 0855 UTC	AL'FA-45 GYeKBOMIT 01 09
7009 kHz, 15-08, 0903 UTC	AL'FA-45 PRAVShchIK 00 23
7009 kHz, 15-08, 1001 UTC	AL'FA-45 BYTNOST' 00 38
7009 kHz, 17-08, 0806 UTC	AL'FA-45 20 011 BOLYuGA 9755 1918
7009 kHz, 17-08, 0815 UTC	AL'FA-45 02 587 GLIZANTIN 7545 2342
7009 kHz, 19-08, 0819 UTC	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34
7009 kHz, 19-08, 1004 UTC	KURGAN-40 DUBLYoR-68 STUPA-32 RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07. S30 in the background
7009 kHz, 19-08, 1937 UTC	AL'FA-45 50 949 MAAR 0960 6694 SALASA 9045 2927. S30 in the background
3828 kHz, 20-08, 1841 UTC	KURGAN-40 DUBLYoR-68 STUPA-32 STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39 ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34. S30 in the background
7009 kHz, 20-08, 0819 UTC	AL'FA-45 98 728 IZMYeNShchIK 0780 9857. S30 in the background
7009 kHz, 20-08, 1220 UTC	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27. S30 in the background

3828 kHz, 22-08, 1839 UTC	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27
3828 kHz, 23-08, 1834 UTC	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34
7009 kHz, 23-08, 1048 UTC	STOROZh-62 NYeVKA-26 KARTA-11 UTyoS-94 KOVBOJ-39
3828 kHz, 29-08, 1841 UTC	STOROZh-62 NYeVKA-26 KARTA-11 UTyoS-94 KOVBOJ-39 RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07
3828 kHz, 30-08, 1840 UTC	STOROZh-62 NYeVKA-26 KARTA-11 UTyoS-94 KOVBOJ-39 ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34
7009 kHz, 30-08, 1554 UTC	AL'FA-45 29 900 VISKAYeC 0830 1320



S4525

Frequency: 4525 kHz USB

4525 kHz, Russian military station. Messages and a channel marker are being sent.

After weeks of just a marker, messages were finally reported by Peter and Schorsi (via ENGIMA)

06-08, 1947 UTC	Marker
12-08, 1830 UTC	Marker
13-08, 2047 UTC	Marker
14-08, 1945 UTC	Marker
15-08, 2129 UTC	Marker
15-08, 2000 UTC	Les 15, ja Sosna 2. 49150 *)
15-08, 2007 UTC	Les 15, ja Sosna 2. 49150
16-08, 1959 UTC	Marker
19-08, 2116 UTC	Marker
20-08, 1735 UTC	Marker
31-08, 1926 UTC	Marker

*) Les 15, ja Sosna 2. 49150 = Les 15, I am Sosna 2. 49150 (Les = forest, Sosna = pinetree)



S5292

Frequency: 5252 kHz USB

01-08, 2028 UTC	Channel marker "B" but very often sending "D"
02-08, 2026 UTC	Channel marker "D"
03-08, 2003 UTC	Channel marker "D"
04-08, 2003 UTC	Channel marker "B"
05-08, 1250 UTC	BOYeC-43 37 899 DIADYeMA 3628 9547 count before the signal
05-08, 1243 UTC	BARZhA-08 37 899 DIADYeMA 3628 9547 count before the signal
05-08, 0805 UTC	BOYeC-43 48 261 MOLYaR 6728 4892
05-08, 0803 UTC	Test count 1 2 3 4 5 6 7 8 9 0
05-08, 0759 UTC	BARZhA-08 48 261 MOLYaR 6728 4892
06-08, 1314 UTC	Test count 1 2 3 4 5 6 7 8 9 0
06-08, 1204 UTC	Test count 1 2 3 4 5 6 7 8 9 0
06-08, 0729 UTC	RYeGATA-75 29 358 DASOVOJ 2638 9573 count before the signal
06-08, 0718 UTC	SYeKRYeT-39 19 345 UGLOBUL'B 3728 3883 count before the signal read by female operator
06-08, 0619 UTC	Test count 1 2 3 4 5 6 7 8 9 0
08-08, 0821 UTC	Test count 1 2 3 4 5 6 7 8 9 0
10-08, 0817 UTC	Test count 1 2 3 4 5 6 7 8 9 0
12-08, 1829 UTC	Channel marker "B"
14-08, 1540 UTC	Channel marker "B"
14-08, 1651 UTC	Channel marker "D", sometimes "B"

14-08, 2140 UTC	Channel marker "B"
16-08, 2003 UTC	Channel marker "D" and occasionally "B"
20-08, 1915 UTC	Channel marker "B"
31-08, 1926 UTC	Channel marker "B"



V02a
Dirección General de Inteligencia

8009 kHz, 26-08, 2300 UTC Unexpected V02a mixing with M08



V13 - New Star Broadcasting Station
星星廣播電台 Xīngxīng guǎngbò diàntái

Frequencies: 7654, 7688, 8300, 9276, 9522, 9725, 10182, 10522, 11430, 13750, 15388 kHz

Partly unconfirmed new schedules. Please let us know if you hear the station.

15388 kHz	0200-0230 UTC	New Star 1	11430 kHz	0700-0730 UTC	New Star 4
15388 kHz	0300-0330 UTC	New Star 1	11430 kHz	0800-0830 UTC	New Star 4
15388 kHz	0400-0430 UTC	New Star 2	7502 kHz	1200-1230 UTC	New Star 4
11430 kHz	0500-0530 UTC	New Star 3	7502 kHz	1300-1330 UTC	New Star 4
11430 kHz	0600-0630 UTC	New Star 3			



V22

Tentative V22 transmissions. When the voice transmissions disappeared a couple of years ago, BPSK-like transmissions appeared on the V22 frequencies. Although it is not certain that there is a relation, it is likely that V22 was replaced by these transmissions. Antonio and a friend of him monitored the frequencies recently and found several of these transmissions. So, tentative V22, no proof yet that it really is them.

15799 kHz, 16-08, 1425 UTC, DQPSK 62.5 Bd
6095 kHz, 25-08, 0820 UTC, DQPSK 250 Bd
9394 kHz, 25-08, 1339 UTC, BPSK 62,5 Bd
19942 kHz, 25-08, 1340 UTC, BPSK 62.5 Bd



VC01 - Chinese Robot ***Chinese Air Defense***

Modes: USB and LSB

The station changes its frequencies frequently. Known frequencies:

3036, 3749, 3837, 4075, 4140, 4165, 4175, 4180, 4258, 4343, 4410, 4422, 4427, 4480, 4530, 4580, 4726.5, 5114, 5195, 5232, 5288, 5303, 5328, 5330, 5343, 5393, 5461, 5466, 5471, 5592, 5700, 5740, 5742, 5799, 5802, 5820, 5832, 5892, 6209, 6479, 6771, 6840, 6858, 6860, 6949, 6960, 7090, 7351, 7608, 7684, 7726, 7739, 7744, 7756, 7770, 7792, 7864, 7865, 7880, 7890, 7924, 7938, 8000, 8025, 8046, 8170, 8346, 8779, 9000, 9129, 9132, 9169, 9192, 9290, 9340, 10508, 17392 kHz.

Logs:

9132 kHz, USB, 06-08, 0028 UTC

9132 kHz, USB, 22-8, 1138 UTC

MORSE STATIONS



MX ***Russian Military beacons***

Current cluster frequencies:

3594, 4558, 5154, 7039/7508, 8495, 10872, 13528, 16332, 20048 kHz

Other frequencies:

L 6917.5, 8497.8 kHz

V 3658, 4150, 6809, 6928, 7027.5 kHz

R 5466 kHz

W, R, N, G, C, K, Z, L, V, Ü 5620, 5835, 8029, 8112, 8162, 8895 kHz (Tu-Bear net)

Cluster beacon slots:

.7 "D", Sevastopol

.8 "P", Kaliningrad

.9 "S", Severomorsk

.0 "C", Moscow

.1 "A", Astrakhan (inactive)

.2 "F", Vladivostok

.3 "K", Petropavlovsk Kamchatskiy

.4 "M", Magadan



M01 / M01b

M01b, 5065//5805 kHz, 13-08, 1942 UTC

815 379 379 30 30 = =

03016 27233 96271 64559 14111 57313 36969 31574 72444 00387

61941 06576 83756 39617 03968 29674 52006 68007 98868 91408

77173 68608 51791 87405 77661 53813 58294 69690 95717 97222

= = 379 379 30 30 0 0 0

4905 kHz, 20-08, 2000 UTC

025 911 30 =

34998 60409 36471 84354 06425 02342 49605 08120 22043 95948

36339 14799 48973 36763 95019 21350 64904 30279 64276 90860

36181 26086 68265 71397 86846 86064 65716 16278 32655 82413

= 911 30 000



M03

7837 kHz, 06-08, 1320 UTC

435/33 = =

03894 81176 58370 91691 29194 90522 71265 75279 16515 13699
29570 17061 72184 52266 44273 63463 93613 63803 66085 35604
49183 91713 72536 92961 00970 53950 74209 28613 25723 35363
74593 74968 75025 = =

435/33 = = rpt msg = = 000

7727 kHz, 10-08, 1320 UTC

543/33 = =

13084 36220 06468 16757 61465 49396 50722 93772 70039 89657
76213 25292 43725 18132 88656 79695 03833 64323 24095 99199
71091 37469 77638 82735 83585 75373 13687 38298 10179 28413
80150 56097 69116 = =

543/33 = = rpt msg = = 000

15632 kHz, 14-08/1608, 1420 UTC

879/31 = =

03496 24338 51807 23731 31588 45931 36895 51556 13342 52318
15528 76825 69228 77958 80264 88548 34338 08658 73926 84280
50430 97961 84308 02749 15048 98023 31981 17348 91880 25001
00563 = =

879/31 = = rpt msg = = 000



M08a

Dirección General de Inteligencia

11435 kHz, 25-08, 1549 UTC

Brief Radio Havana then previous day groups followed by 13077 80508 87802 03878 62643 21585

8009 kHz, 26-08, 2300 UTC

M08a mixing with V02a: YL/SS 5FGs



Above and right:

Soviet Military Morse keys found on W1TP TELEGRAPH & SCIENTIFIC INSTRUMENT MUSEUMS: <http://w1tp.com>



M12



14468/13568/12178 kHz, 01-08, 1310/1330/1350 UTC

451 1 (R) 9874 147 9874 147

86361 58869 07212 65424 39624 99321 39825 82648 71953 33630
63120 86732 25821 34652 42909 32821 10552 56731 62513 85887
39032 63053 54432 38075 96890 08891 80385 25745 27803 09700
99986 04806 72045 77742 04900 71869 61634 47198 88100 66959
94003 75988 86886 54812 70396 30401 12467 80636 76204 03826
71012 63808 20247 00482 38045 45156 56154 62052 36990 37384
85404 68208 06672 06118 14161 44449 76451 34734 31200 77753
46619 28918 95412 68336 07418 24662 90207 23857 09002 81631
44524 58094 46748 36566 94905 70352 24927 43913 74112 08361
59041 14035 80040 59606 61643 93074 31390 08061 45245 62770
54069 44658 81343 64206 20082 95248 36277 46355 09989 36342
75865 06534 79009 61520 95380 59667 78558 36026 08833 71285
14068 23123 21952 99304 81629 72090 48662 94880 30721 30945
25859 95876 59192 49267 20532 34863 83966 66366 81087 83236
65570 77125 85576 35911 67169 89718
000 000

9327 kHz, 03-08, 1750 UTC

938 938 938 1 938 938 938 1 then stops.

Operator error. The transmission started 10 minutes after the 3rd transmission at 1740 UTC

14728 kHz, 10-08, 1140 UTC

973 1 (R) 1569 139 1569 139

10701 10506 51830 56691 85379 65897 31791 33809 27652 11143
11653 46003 58282 58592 47183 02004 53092 73859 67113 06110
80132 89764 73603 03172 31425 83024 75546 40987 89795 66996
17068 81990 39081 72758 97579 46280 12945 78936 95521 24524
22267 86838 20288 46227 24057 11228 41427 18556 84910 61117
51612 32353 41867 07173 93235 12612 80888 63185 23412 12163
02699 27726 76980 47167 62727 18222 52415 49472 03369 45315
48168 57588 62394 88896 00285 79557 44442 59104 82288 05529
58360 81440 38522 04863 74692 63159 89314 96603 72542 36303
25032 80983 67773 02685 50114 59748 05979 62067 14449 30462
59933 88829 70444 05937 15799 36909 96502 23428 17941 46792
47802 49521 39003 34471 00839 65582 07940 47748 88355 61418
66675 11818 31703 69144 42519 75160 43823 93848 99294 68670
28477 22756 01530 46862 19764 30383 38708 89606 33980
000 000

13386 kHz, 13-08, 1500 UTC

725 1 (R) 3743 144 3743 144

01642 10917 78551 09569 67786 33867 62416 47675 60726 05695
32229 42229 28714 93734 24936 40925 72393 37046 24303 91389
71072 21174 59451 20177 56455 10822 74257 71492 21347 76157
44627 71217 43255 87239 11180 89310 79239 35282 70093 85465
17472 02595 83666 69958 00675 62137 12358 10530 84970 17881
43151 71949 81556 31358 07745 20049 51686 84386 44685 11610
62497 57904 66528 20740 74019 2XXX6 16098 X3326 38089 07176
47036 94733 29466 93023 75994 94325 46700 62443 68740 80556
21143 99029 21647 80079 23437 40906 69759 28823 61661 45848
50301 28509 97822 50544 04050 18631 45212 71421 77634 57185
80020 76656 95067 41923 92984 03140 26723 41381 37827 71749
02734 89577 47857 71393 30962 81533 02691 58995 30295 57364
55869 51491 47061 17503 59332 72129 64029 58548 59710 64591
18282 75790 11965 26773 35644 94938 30178 20908 55119 05926
41179 24770 49196

000 000

12205/13559/14728 kHz, 17-08, 1100/1120/1140 UTC

973 1 (R) 4108 133 4108 133

57580 21222 80282 24629 85838 62838 82492 75777 13350 58704
23882 01019 51109 02548 15055 94677 99362 52999 41067 99380
88029 69547 02129 65499 24744 31644 25903 73985 71624 73896
3759R 49457 60924 94583 04262 41703 74978 59855 50558 56895
94447 15850 60218 64692 29608 41084 59236 82379 50339 13995
92030 14696 70641 01428 27542 89870 27286 59982 38869 54916
56382 24977 87209 93808 77014 14272 45877 70568 59891 03611
02791 09957 47303 15023 82645 55257 49984 30332 93651 60968
52034 30747 00807 93591 32006 59514 53078 50634 83976 71243
83219 13510 54598 24126 11152 98447 66700 81576 51523 13060
03333 76624 83711 07413 81133 59281 40549 56031 01055 56547
50711 71311 12012 02885 92872 02480 37226 01195 10946 21190
16504 72753 30537 32869 82474 63520 81627 11514 77683 30845
98477 51202 95384

000 000

12205/13559/14728 kHz, 24-08, 1100/1120/1140 UTC

973 1 (R) 4973 129 4973 129

92658 31555 47906 73217 68016 45810 06299 48531 13892 87628
52206 55077 14350 34816 43378 84864 49512 77205 49138 12843
39561 90912 00699 86414 92188 69982 67552 68900 83369 81973
97553 09062 66544 83094 65101 07507 83908 93338 81237 91845
36595 51786 19248 74659 50297 78826 31414 34628 93773 64065
76978 80945 59019 38438 73141 69008 35377 61953 91501 02459
34369 76723 09589 03219 92351 89328 36716 38676 79404 93899
82005 88566 49528 41114 85452 79506 87800 63241 24451 62537
92555 54422 74195 92784 73051 91551 83131 52103 83937 76390
73665 35754 22846 88527 63439 66206 91609 38887 21608 35234
27340 01172 74837 32380 79071 48378 47485 63176 87349 79460
17288 04595 86785 81990 48087 53071 06283 16188 64204 55891
59823 28018 77791 14227 36583 12896 53556 53761 83983

000 000



M14

5240 kHz, 09-08, 2300 UTC / 5825 kHz, 10-08, 0000 UTC

376 (R) 524 524 020 020

83295 26704 14838 56438 79563 29243 87610 83817 86096 29313

36191 62701 75747 74420 15841 41958 10736 14238 26365 23051

524 524 020 020 00000

6856 kHz, 11-08/25-08, 1821 UTC

163 (R) 972 972 020 020

43765 19832 72308 59265 71534 67442 02617 59292 81721 62043

91633 40237 51189 52966 21205 48810 25981 48206 28881 93711

972 972 020 020 00000



M41

Russian Air Defence Forces

Войска ПВО Voyska PVO

8747 kHz, 22-08, 1214-1238 UTC

JAE3 DE DNG1 ZUB ZST K

R K

I5CZ DE DNG1 ZBB ... QBE K

R K

I5CZ DE DNG1 ZBH ZPA RPT ZBH ZPA K

JAE3 DE DNG1 ZUB ZST EEEEE

JAE3 DE DNG1 ZUB ZST QBE K

R K

V V AR

VV I5CZ DE DNG1 ZBH ZPA QBE K

V AR V AR

QCM I DE ZEY5 K

ZY5 DE QCM I K

QSA 2 QSA ? WZD QRJ? K

QSA 2 WZD QRJ 2 K

R K (1231z)

AQKP DE ZEY5 ZUH ZPS QBE K

R K

AQKP DE ZEY5 K

QSA 2 QSA ? WZD QRJ ? K

R K

QCLS DE ZEY5 QTC ZSL K

ZEY5 DE QCLS QRV ZS. K

ZEY5 524 35 22 1533 524 =

ZSL FOR 561 552 FM 392 724 429 =

KWIOG F\OPOW DSL\AK Q\UZTQ DSL\AK (Cont'd)



M51 / FAV22 ***8^{ème} Régiment de*** ***Transmission***

M51 was last reported in June and the well-known message sent by FAV22 seem to have changed, or better said, combined.

3881//6825 kHz, 13-08, 1715 UTC i.p. VXRAD 25893 VXATG LGPRO DGURA MVNDJ SKAOI DJSOW JFEIS LPOID NCZMA XZAIU DWEAS XMCNS 96314 GATSW ...

It seems to be running a combination of the various FAV22 training groups. I checked the stuff that I copied with the published training messages http://www.r-e-f.org/index.php?option=com_content&view=article&id=715&Itemid=444 and noticed that they are sending parts of different messages combined in one long stream of characters.

6825 kHz, 24-08, 2205 UTC

VVV VVV VVV DE FAV22 FAV22 FAV22 QLH 4/81/881/6/55 ...



M89 ***Chinese military***

Stations and strings:

V A7TR A7TR A7TR DE DI9Q DI9Q
V 5RAB 5RAB 5RAB DE M9AB M9AB
V 7NPE 7NPE 7NPE DE QV5B QV5B
V 6TRW 6TRW 6TRW DE J9NS J9NS
V 7NPE 7NPE 7NPE DE QV5R QV5R (faulty txm)
V 8CPZ 8CPZ 8CPZ DE XW6W XW6W
V 8DKB 8DKB 8DKB DE ODY8 ODY8
V 8PEX 8PEX 8PEX DE TI5F TI5F
V BNGC BNGC BNGC DE XSV85 XSV85
V BIQ9 BIQ9 BIQ9 DE ISL2 ISL2
V BRH0 BRH0 BRH0 DE 8NGG 8NGG
V B9SR B9SR B9SR DE AL6R AL6R
V CQ CQ CQ DE DP91 DP91
V CQ CQ CQ DE DP0491 DP0491
V DKG6 DKG6 DKG6 DE 3A7D 3A7D
V DKSL DKSL DKSL DE ALSK ALSK
V DKIL DKIL DKIL DE ALSK ALSK (faulty txm)
V DP9J DP9J DP9J DE CQ CQ
V EI0B EI0B EI0B DE JHG2 JHG2
V GKLO GKLO GKLO DE TYUI TYUI
V GKN7 GKN7 HKN7 DE F3J5 F3J5
V H2FL H2FL H2FL DE DRV8 DRV8
V JKD JKD JKD DE SLBC SLBC
V M8JF M8JF M8JF DE RIS9 RIS9
V MW3D MW3D MW3D DE 2SLC 2SLC
V N4FM5 N4FM5 N4FM5 DE NAT491 NAT491
V PGG9 PGG9 PGG9 DE MI6Y MI6Y
V RA5J RA5J RA5J DE BP2S BP2S
V RXP7 RXP7 RXP7 DE CZT2 CZT2
V S2LZ S2LZ S2LZ DE YBA6YBA6
V SR3H SR3H SR3H DE FGH8 FGH8

V SXL6 SXL6 SXL6 de 9QFZ 9QFZ
V TKLO TKLO THLO DE TYUI TYUI
V TY9D TY9D TY9D DE EOX2 EPX2
V VTX7 VTX7 VTX7 DE TZ7B TZ7B
V VXL1 VXL1 VXL1 DE XIW2 XIW2
V WZG6 WZG6 WZG6 DE 4VTG 4VTG
V YUQW YUQW YUQW DE ASDF ASDF
V ZRM7 ZRM7 ZRM7 DE LCM0 LCM0
V N4FM5 N4FM5 N4FM5 DE DUT491 DUT491
V Q5U8 Q5U8 Q5U8 DE 8QPP 8QPP
V QHV8 QHV8 QHV8 de 8QPP 8QPP
VVV Q2M Q2M Q2M DE NYZ NYZ
V DKSL DKSL DKSL DE ALSK ALSK
V 3A3J 3A3J 3A3J DE B4ZJ B4ZJ
V HER6 HER6 HER6 DE WU6L WU6L
V BR3S BR3S BR3S DE JU9D JU9D
V DGG6 DGG6 DGG6 DE 3A7D 3A7D (faulty ?)
V TY9D TY9D TY9D DE EPX2 EPX2
VVV VVV VVV 4GN 4GN 4GN DE DE QJ7 QJ7
VVV CQ CQ CQ DE UKNO UKNO
VVV WNF WNF WNF DE FXM FXM
VK6EN K6EN K63N DE D3MR D3MR
V DF4J DF4J DF4J DE D3MR D3MR
V FJ4B FJ4B FJ4B DE D4MR D4MR
V SNT9 SNT9 SNT9 DE D3MR D3MR
V DF4J DF4J DF4J DE D3MR D3MR
V 43A 43A 43A DE A34 A34
V K6EN K6EN K63N DE D3MR D3MR
VVV 2GHY 2GHY 2GHY DE RBR7 RBR7
VVV 3XSY 3XSY 3XSY DE RBR7 RBR7
VVV 4GN 4GN 4GN DE DE QJ7 QJ7

VVV Q3TI Q3TI DE U2ID U2ID U2ID

BM2 DE 7MT
IUPV
NRKW
AIXW
LJNL
KOMA
IKRG
WICH
STVE
WXAC
BBSQ DE J4PR
SHS7 DE J4PR
CMOR DE J4PR
HLT4 DE J4PR
SSIZ DE J4PR
KU6X KU6X DE U68Y U68Y
DLR9 DE GHQQ
CV6K
LQH6 LQH6 DE CXD9
VV V DFS8 DFS8 DE CXD9
7ULS
FJW4 FJW4 DE CXD9
7D3G DE PW1R

Messages:

8073 kHz, 01-08, 0017 UTC
Switched to voice traffic at 0020 UTC

773 356 4T4 NN3 444 3DT TTA N34 TTA ND4 TT5 4DT 4D6 .4
773 TU5
773 TU6
773 TU7
773 356 464 NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TUN
N34 ..3
773 353 III 2P GA BT BT 37U 4A5 NN3 444 3DA 4DT 4D6 AR
W AR AR

5801 kHz, 02-08, 2241 UTC

VVV IUPV K RR . OUT NR UKNO TT? QSA ? QSA ? (IP - Handsent -2242z)
R QSA 3
RRR QSA 3
VV CQ CQ CQ DE UKNO UKNO
FF NR NR 2983 0600 = =
MSG NR 00III
BT MSG NR 00II QSA ? QSA ?
DE
NR ..
MSG NR ? 2?? .. PSE CY
RR 7G W IEC K NR NR (Normally associated with exercise traffic)
NR 2984 CK
NR 2984
NR 2984 CK 024 . 08 E
0803 0600 = =
64D5347.. 3.? (Cont'd)
AS AS
130.. N? 13W =
R AS AS
R R
AS AS
NR 13W
TW? (Fading)

8073 kHz, 02-08, 003 UTC

V BNGC (x3) DE XSV85 (x2)
HR 7G GA PSE CY (x2)
NR 0648 CK 114 35 0802 0709 =
TTU 3U4 3A4 TAU
773 TA7
773 35U 4AD NN3 434 3DT TTA N34 TTA ND4 TT4 4DT 4D6 TAD
773 TAN
773 TU3
773 353 37U 4T7 NN3 434 3DT TTA N34 TTA ND4 TT4 4DT 4D6 TUT
773 357 374 4AD NN3 434 474 437 3DT TTU 4DT 4D5 TUA
773 357 373 4AD NN3 445 3DU 4DT 4D6 TUU
773 356 4A7 NN3 444 3DA 4DT 4D6 TUA
773 TU6
773 TU7
773 356 4A7 NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TU5
773 356 4A7 NN3 445 3DU 4DT 4D6 TUN N34 T33 III = =
773 353 373 4AA NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 AR AR AR
NR 0648 CK 114 35 0802 0709 = =
TTU 3U4 3A4 TAU
773 TA7 (Repeats message)
AR AR
AS
7G GA 7G AGN GA 7G AGN GA
NR 0648 CK 114 35 0802 AR AR
(Switched to voice - USB - 0028z)

3330 kHz, 09-08, 1226 UTC

7AU3 5ND3 5NT4 5TAN 6335 A7DA
III DN35 4N67 AN64 6UN4 (Cont'd)

5801 kHz, 03-08, 1107 UTC

VVV NRKW K
NR/
VVV AIXW K
VVV LJNL K
VVV KOMA K
VVV .JQA K
VVV Q.FG K
VVV FF K. VVV .F.
VVV IK.G K. VVV IK.. K
VVV IKRG
VVV WICH K
VVV STVE K
DE WXAC K
QSA 3 K
NR 7G PSE CY. 7G PSE CY. 7G PSE CY. G PSE CY
7G PSE TR R 7G 74 NR 8930 CK 80 NR
NR 8932 CK 80 .. ? C UM4
OO ?
NR/. CK .. CLS ... 0803 9? 1715 =
FF NR NR 8932 CK 80 .. 0803 1915 III = =
U7.3 36N4 NAD3 547N 4TU7 ADT4 A4D5 6U7. 3ATN 56.. (Cont'd)

7554 kHz, 03-08, 1015 UTC

773 35A U46 353 4AA 444 4D6 3DU TA3
773 35A U46 353 4T7 N3D 4T3 445 4D6 3T4 AGN AGN
NR 6 05 CK 00 5 35 0000 0009 00009 30000 71844N ... TTT3 3U4 3A.. TT4
TT4
773 353 4AD 446 467 N3D 447 4D6 33D 75D 4DU 3DU TT6
773 34A U46 353 4AD 446 4D7 4D6 33D 75D 4DU 3.Y TTD
773 355 4AD 446 467 4T6 33D 4D3 3DU TTN
773 355 4AD 446 4D6 3DU TAT
773 355 4AD 44. 4D6 33D 4D3 3DS TAA
773 355 4AD 445 4D6 3DU TAU
773 35A U46 353 4AA 444 4DN 3DU TA3 N33 35A U46 353 4T7 N3D 4T3 445
4D6 3DU ZNN SK

3330 kHz, 05-08, 1640 UTC

FF CQ 63 EEEEE 05.8 TO 3782 .358 UGT COMM =
98EO78/..82/0200/E.E1. NR/0.98 III =
9M 978/3782/0201/11.NR/.088 EEE /058 EEEEE/0598 AR
V MW3D DE 2SLC

8073 kHz, 05-08. 0010 UTC

773 T3U
773 T33
773 353 373 4AA NN3 435 474 436 3DT TTU 4DT 4D6 III = T3T
773 T3A
773 353 373 4AA NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 AR 7G AGN
NR
NR 0654 CK 117 35 0805 0711 =
TT5 3U4 3A4 TAU
773 TA7 773 TAD
773 35U 4T7 NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TAN
773 TUA 773 TUA
773 356 R ? 4T7 NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TUT
773 357 R ? 373 4AD NN3 444 R ? 3DU 4DT U ? 4D6 TUA
773 TU6
773 TU7
773 3U3 5U4 A5 NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TUA
773 TU5
773 35U 4T4 NN3 434 W ? 3DT TTA N34 TTA ND4 TT5 4DT AR ? 4D6 XN
773 T3U
773 T33
773 353 373 4AA NN3 43. 574 436 3DT TTU 4DT 4D6 III = T3T
773 T3A
773 353 373 4AA NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 AR AR
(Switched to voice - 0019z)

6666 kHz, 05-08, 1016 UTC

6D6U 6NTN 733T 3TU3 46U7 45DT 6AN5 6NT3
AR
VV BBSQ DE J4PR K
R QSL ? K
R AS
.. SK GB (Outstations on a different frequency)
VV SHS7 DE J4PR K
R QS. QSL ? K
AGN AGN K AS AS
VV CMOR DE J4PR K
R QSL ? K
AGN AGN
QSL 1819 K
AGN AGN AGN K
QSL 1818 K
R R
U QSY TO NR 02 NR 02 K SK SK
VV 4JTZ DE J4PR K
R QSL ? K
R U QSY TO NR 06 NR 06 K SK
VV HLT4 DE J4PR K
R QSL ? K
R U QSY TO NR 10 NR 10 K SK
VV SSIZ DE J4PR K
U QSY TO NR 02 NR 02 K K K K K K
U QSY TO NR 12 NR 12 K K K K K K
U QSY TO NR 7777 K. U QSY TO NR 7777 K K K K
U QSY TO NR 7777 K K
U QSY TO NR 9999 NR 9999 K K K K K K K K
VV BBSQ DE J4PR K
R R QSA 2 K
R IEC 14EC BT 916QR IEC = 9169 AR K
R R HR NR 134 K
R HAJR HR T.R
HR F GA K
R
FF NR 11/EX 1R FF NR 11/EX 1832 RMKS 4594 TO 3424 = =
QRS 03/01R
= QRS 02 AGN AGN =
QRS 03/UU W2X K

8888 kHz, 07-08, 0136 UTC

NR 0002/CCK CK 99 24 0807 1000 RMKS CQ HR 7G GA = =
6DA7 647A 4UTD 6U53 6A3U 54NU A5UD NU54 TUDA U3AN (Cont'd)
VVV CQ (x3) DE 3SY (x2) 7G
HR 7G GA
NR 0002/CCK CK 99 24 0807 1000 RMKS CQ =
6DA7 647A 4UTD 6U53 6A3U 54NU A5UD
NR 0002/CCK CK 99 0
HR 7G AGN = =
NR 0002/ ... 647U ?
NR 0002/CCK CK 99 24 0EEE
NR 0002/CCK CK 99 24 0807 1000 RMKS CQ EEEEEEE
= = 5 5 =

7777 kHz, 07-08, 0131 UTC

R QSL 1010 K
R R HR 1001 K
R R HR WK 2 K K
NIL SK GB
R R SK

5555 kHz, 07-08, 1314 UTC

4DA3 5D 05 05 055
HR KCB GA K. HR KCB GA K
MSG NR 8647/KCB CK 49 40 0807 2100
RMKS RKMS RMKS RMKS HR KCB GA K
QSA K QSA K

8073 kHz, 06-08, 0009 UTC (morse after data mode)

V BNGC (x3) DE XSV85 (x2)
HR 7G GA
NR 0656 CK 51 35 0806 0732 = =
TTD N5U TT6 N53 TT6 N54 700 TTA 746 N65
6T5 6T6 6TA TA3 N65 6T5 6AT TT5 6A4 UT5
6A5 3TN 6A6 N45 6A7 T45 6U4 ..TT 74D 6UU
TAA N34 TA3 635 4A3 4UT DAU U56 N35 DA3
TU4 DAA D5D NU7 DD3 6A4 UAN 6A5 U6A 6A7
T5T AR
AHR 7G GA
NR 0657 CK 149 35 0806 0735 = =
TT6 3U4 3A4 TAU
773 35U 4T3 NN3 445 3DU 336 N3D 4D NN3 453 3D5 4DT 4D3 TA7
773 TAD
773 TAN
773 TUA
773 TU3
773 35U 4T7 NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TUT
773 357 373 4AD NN3 445 3DU 4DT 4D6 TUU
773 35U 4T4 NN3 434 3DT TTA N34 TTA ND4 TT4 4DT 4D6 TU4
773 45U 4T4 NN3 444 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TU5
773 456 ...3 C3 446 3D3 336 N3D 357 373 4T3 NN3 456 NN6 UU3 TT4 N34
TT5 4DT IUD6Y TU6 III = =
773 45U 4T3 NN3 445 3DU 4DT 4D6 TU7
773 354 37U 4AA NN3 445T 3DU 4DT 4D6 TUN
773 T3.
773 357 367 4AU NN3 446 474 43D 3D3 4DT 4D6 T3T
773 T3A
773 357 367 4AU NN3 445 474 437 3DT TTU 4DT 4D6 AR AR
(Switched to voice - 0019)

5555 kHz, 07-08, 1314 UTC

AGN NR 7G/
7G NR 002/CCK CK 195 39 0805 1400 RMKS 5848 TO 5612 K K
7G NR 002/CCK CK 195 3
05 (1315z)
GA NR 23/CCK CK 2Y 3N 6 005 1700 RMKS 7753 TO 1916 77.0 10
= 5TA5 .TU5 3A37
05 = 7A56 4364A574A4

6666 kHz, 07-08, 1626 UTC

05 05
5522 222961290 QS QSA 2 QS/EEEE QSY 3 NF S 1295
9 = 009 09 R
1293492494094827 1495405 0021EEEEEEEEEE
3527069427
9393797454361UEEEEEEE
3612 4123 9391 428 AR
555 55TTTTT 4 TT..
059494940592429
2.92
VV 2GHY 2GHY 2GHY DE RBR7 RBR7
IEC = 2392 AR K (Exercise related)
R BT 6346 AR
K
R HR MSG 49 AR K
MSG NR 01/EX CK 40 59 EEEEEEE 2 48 QHV8 QS
VV VV 3XSY 3XSY 3XSY DE RBR7
VV 2GHY 2GHY 2GHY
VV VV 2GHY 2GHY 2GHY DE RBR7 RBEEEE
VVV 2GYH WGHY DE RBR7
NC KO234 .5G NR 12321 1.9 AR
.4.64T4PSE 4474 Q.. 4Q 4
4024
VV 2GHY 2GHY 2GHY DE RBR7 RBR7 RBR7 K
223
R R IEC = 2392 AR
OK ...
U3

8073 kHz, 06-08-2015, 1155 UTC

4DT 4D4 3UD TAU 773 354 367 4T3 NN3 454 3D6 33N N3D 4U4 443 3DN 4DT
4DU TA7
773 354 367 4T3 NN3 453 3D5 34T N3D 4A5 NN3 454 3D7 III = = 4DT 4DU
TAD
773 TU4
773 755 353 37U 4A5 NN3 446 3D4 34T N3D 4A4 NN3 447 3D5 4DT 4D4 TAN
773 TU3
773 356 4A5 NN3 445 3DT TTU 34T N3D 4AN NN3 435 466 3D3 4DT 4D6 TUU
773 356 4AA NN3 435 3DT TTU 4DT 4D6 TU4
773 753 TU5
773 354 367 4AA NN3 454 3D7 4DT 4D4 TU6
773 TU7
773 TUN
773 357 373 4AA NN3 .47 46D 3D5 4DT 4D5 T3T N34 T33
773 357 373 4AA NN3 436 46D 3D4 4DT 4D5 476 TT6 3U6 3AN 3UN TAU
773 354 37T III BT BT 4U4 443 3DN 34T N3D 4AA NN3 456 3D6 4DT 4D4 TA7
773 354 367 4AA NN3 454 3D6 34A N3D 4AA NN3 453 3D5 4DT 4D4 TAD
773 TU4
773 755 373 4AA NN3 447 3D5 4DT 4D5 TAN
773 TU3
773 353 4AU NN3 446 3D3 4DT 4D6 TUU
773 35. 4AU NN3 435 466 3D3 4DT 4D6 TUU
773 4P 61W BT 61W =
353 4AU NN3 435 466 3D3 4DT 4D6 TU4
773 753 TU5
773 354 367 4AA NN3 454 3D7 34A N.... 3D5 4DT 4D4 TU6
773 TU7
773 TUN N34 T33
773 357 374 4AA NN3 447 .6D 3D 4DT 4D5 476 AR AR
A HR MSG GA A HR MSG GA A HR MSG GA
NR NR 0659 CK 83 35 0806 1623 = =
TTD N5 TT6 N53 TAD N54 7TT TTU 746 N65
6T5 6T6 6TA TA3 N65 6T5 6AT TA4 6A4 UTN
6A5 UNU 6A6 N45 6A7 T4D 6U4 3TT 74D 6UU
TAA N34 TA. 635 4A3 4UT DAU U56 N35 DA3
TU4 DAA D5D NU7 DD3 6A4 UU5 6A5 U.3 6A7
TSU NU6 6T5 N44 4AA 77T NAU 777 TAU 773
TA7 773 TU4 773 TU5 773 33U NU7 D73 436
DTU 77T 7U5 7U5 AR AR AR
(Switched to voice – 1214 UTC)

5500 kHz, 09-08, 1725 UTC

3947/3309/9786/3474/4149
MSG NR AGN E MSG
NR 03/CCK CK 25 37 0810 0125 RMKS 9549 TO
3999/3704/3419/3947/3309/9786/3474/4149 = =
TN5N U4UD U77D T44U 5N3A D5N7 7T4N 6N45 TA7N TT5T
737U 3U6N D7TD N76U 3T53 4N66 T6T7 6DN3 TDA3 6NTU
UNT4 NT4T 6DNU DANA UD5U AR

8073 kHz, 10-08, 1134 UTC

V BNGC (x3) DE XSV85 (x2)
HR 7G GA PSE CY
HR 0672 CK 110 35
NR 0672 CK 110 35 0810 1552 = =
TAT 3U6 3AN 3U7 TAU
773 TA7
773 353 373 4AA NN3 435 466 3DT (Cont'd)
AR AR
7G AGN
NR 0672 CK 110 35 0810 1552 = =
TAT 3U6 3AN 3U7 TAU
773 TA7
773 353 373 4AA NN3 435 466 3DT (Cont'd)
AR AR AR AR AR
(Switched to voice USB - 1152z)

5555 kHz, 10-08, 1515 UTC

MSG TU XXX EDE YAOMIN AR
XXX AXXX XXX IE NR
= = = = = ELECS EEEEE =
ELECHISHI =
GUN GOU =
GUG EEEEE = GUN GON EEEEE = GUN GOU AR K
EEEEEE S
M N = =
NICH EEEEE = NICHU U SHA AR
U SHA AR
SHA AR A AR (1521z - Other station not on this frequency)
= = =
CHO EEEEE = CHOU NIXIAO JI JI ZADT =
CHOU NI XIAO JI JI ZA DI
ZADI
NIBUFUA
NI BUFU EEEEE =
NI FADEBUFA = (is there a way you can do it?)
JIAN JIAN NI DA I DA GDAM A GEHAI BUI BUXING LI AR (little by little you
give/gave is not suitable)
BU LI AR SK SK

5588 kHz, 11-08, 1158 UTC

III N7N6
MSG NR 044 CK 301 44 0811 1930 =
6575 DT56 74DN U7AT NU35 UNT6 NDT7 67T3 TT47 TT3U (Cont'd)
III N7N6

6825 kHz, 11-08, 0206 UTC

CQ (x3) DE DP91 (x2) V
PSE ALL ... QSC PSE ALL TT RR S (Appears to be working 91 station)
DP7991 ..
DP6791 QSA 3 K
GB

7777 kHz, 11-08, 0754 UTC

7G NR 206 CK 199 55 08 11 1553 RMKS 0682 TO 0687 R K
T I T
R K R K
7G NR 206 CK 199 55 08 11 1557 RMKS 0682
R K
7G NR 206 CK 199 55 08 11 1559 RMKS 0682 TO 0687 R K (Note how time
was changed to reflect time message is being sent)
R K R K R K RPT DATE
R R R R DATE BT 0811 0811 R K

8073 kHz, 11-08, 0006 UTC

V BNGC (x3) DE XSV85 (x2)
NR NR NR NR 0055 NR NR 0673 CK 92 35 0811 0715 =
TAT 3.4 3A4 TAU
773 TA7
773 353 373 4AA NN3 435 3DT TTU 4DT 4D6 TAD
773 TAN
773 TUT
773 353 37U 4AA NN3 434 474 437 3DT TTA N34 TTA ND4 TT5 4DT 4D3 TUA
773 TU3
773 TU5
773 356 4AA NN3 445 3DU 4DT 4D6 TUU
773 T..
773 TUN
773 353 37U 4AT NN3 435 3DT TTU 4DT .. TU6
773 TU7
773 357 374 4AA NN3 435 474 43D 3DT TTU 4DT 4D5 T3T N34 T33
773 353 37U 4AT NN3 445 3DU 4DT 4D6 AR
7G 55 7G AGN
NR NR 0673 CK 92 35 0811 0715 = = (Repeats msg) AR

8110 kHz, 11-08, 11355 UTC

RXTX = = = T X
30 30 TATATTATATAWW
RIG TTS MODE SCAN FUNCA = B SPLIT MW ICOM ICT 75A . F TRANSTVER
POWER KG I = (Is this M89 operator an amateur?)
KU3DU4N3DU73 DU73 4 DU UU345DUN3L73 45TD7AB D3 N3D4D = 5A HI
AR AR AR AR
EEEEEEEE VVVVV NW E7 7.E DE DE DE DE DE QVBTS QVB
7NPE 7 D 7.. N7N77D777D7N7D7DN7N7T7D7N777
MSG RR TT CK TTTTT = TT6FM =
R MSG NR NR KN NN = MNR MSK
MSG NR IN CK TIII = II RMKS NBGKDH

8073 kHz, 11-08, 1144 UTC

AR AR (probably XSV85)
MSG AGN
R 7G EEEEEEE7G AGN
NR NR 0674 CK 144 35 0811 1546 = =
TAA 3U6 3AN 3U7 TAU
773 343 ... 4AA NN3 435 3DT TTU 4DT4 DX TA7
773 TAD
773 353 (Cont'd) AR AR

8073 kHz, 12-08, 0006 UTC

V BNGC (x3) DE XSV85 (x2)
7G GA PSE CY
NR 0675 CK 114 35 0812 =
NR 0675 CK 11 NR 0675 CK 114 35 0812 0710 = = =
TAU 3U4 3A4 TAU
773 353 37U 4AA NN3 445 3D. 4DT 4D6 TA7
773 TAD
773 353 37U 4AU NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TAN
773 TUT
773 353 37U 4T7 NN3 (Cont'd)
AR AR
7G AGN
NR NR 0675 CK 114 35 0812 0710 = =
AR AR

8073 kHz, 13-08, 1134 UTC

V BNGC (x3) DE XSV85 (x2)
HR MSG GA K. HR MSG GA PSE CY
NR NR 0676EEEE NR 0678 CK 93 35 0813 0EEEEEE
NR NR 0678 CK 93 35 0813 1622 = =
TA3 3U6 3AN 3U7 TAU
773 TA7
773 TAD
773 TU3
773 TU4
773 354 374 4AA NN3 44U 5474 43D 3DT TTU 4DT 4D5 TAN
773 TUT
773 TUA
773 353 37U 4AT NN3 445 3DU 4DT 4D6 TUU
773 TU7
773 755 RW? 353 37U 4AT NN3 446 3D3 4DT 4D6 TU5
773 TU6
773 TU7
773 753 357 373 4AA NN3 445 3DU 4DT 4D6 TUN
773 356 4AA NN3 445 3DU 4DT 4D6 T3T N34 T33
773 356 37U 4AT NN3 434 3DA 4DT 4D6 3UD N47 3U7 3UN N75 AR
MSG AGN
NR 0678 CK 93 35 0813 1622 = (Repeats msg)
AR AR (Switched to voice ay 1148 UTC)

3330 kHz, 17-08, 1735 UTC

98.78./34.4/.300/117 NR/05..98.
88.8/34.4/0300/117NR/0.0.9 AR

8888 kHz, 13-08, 1808 UTC, i.p.

AR
R QSL .209 K
OK (Both stations on this frequency)
G7 GA K
7G GA ? K
OK K
R R 7G NR 1001 0EEEEEE
7G NR 2001 CK 99 32 0814 0200 RMKS 1881 TO 1887 K
GA
R 01W =
AD4N 5A4T U5T7 DT.T 4A.T DT4A 6.TN T.34 UA54 NDA. (Cont'd)
AR K
OK QSL 02.. K
OK OK
7G GA K
7G NR 02 CK 99 57 0814 0216 RMKS 1887 TO 1881 K K
R GA
R 01W =
T.6D 5AUD 4TT. (Cont'd)
AR
RPT 43W K. R RPT 43W K
OK RPT 43W = = D3D.
R GA (Fading badly)
GA
OK = (Cont'd sending msg)

8060 kHz, 17-08, 0028 UTC

825/68 CA/./7AR
= 15/58../6/56.20.5.2
91..875/6.56P 274/2 AR
UGT COMM = 91../..76.6..61374/..AR
UGT COMM = 348/5332/5686/08/1..0830..68../A/.1/81 AR
UGT COMM = 348/5332/5686/08/17/0830./686/A/61/71 AR
UGT COMM = 348/5332/5686/08/17/083../..86/A/61/.1 AR

3789 kHz, 18-08, 1504 UTC

T43N DT3. D55T 76UN DU36
III = 5574 4550 5 0 05 0 50 50 7G 7G = 7G 777G 7G 1W =
8DU. UA73 TN36 T5NN (Cont'd)
7G 7G 1W K = =
5NU6 N5UT AA3U 45N7 37DT 46A7 U4A7 DA34 N56D (Cont'd)
05 05 50 55 055 055 0055 05 0555 0555 055 055 0 055 055 (Cont'd)
EEEE = 7G 7G 7G 7G 07G G G 7G 7G 1W =
.345 65T7 3NT7 4NA5 6.D4 6DAU (Cont'd)
III K III III N = = 4HI5 = = 5535 7NAU AD4AUN7 7TD3 5NA6 (Cont'd)
PSE CY K E
R ARR/7G = PSE CY IEI
E QSL SIII AR AR K
J AR K. AR AR K. AR AR
R R U 5 R. RUR R / 7G = TS EEEEE EEEE R 7G =
PSE SPSE PSE PSE IPSE IR S 7RH RSE CY / 7G 7G H = =
7G = PSE CY K
7G / 7G / 7G / 7G = S HT /
VVV VVV VVV /7G 7G PSE CY / 7G / = K S
7G = = EEE/ 7G = PSE CY K
VVV VVV VVV QST EEEEE Q3TI DE U2IB
VVV Q3TI Q3TI DE U2ID U2ID U2ID K
R R KIT EEEEE R R A
KU6X KU6X DE U68Y U68Y
0005 UBOI YUB8 Y7QSA 2 QSA ? K
R R R R R QSA 2 I. IEC 1234 AR
EEEE QSA 2 IEC 7G QSA 2 IEC = 1234 AR K
R IEC = 7G 7G 5 EEEEE N 7G = PSE TEC. EEEE
7G = PSE CXXY EEEE N 7G = ? NIL SK GB
R 00
5555 055 EEEEE 55 5050505 05 05 055 05 05 05
TU.AD.7TU5NNT..455U3U.676.DAD (Cont'd)
III ?
N5.D N7A6 (Cont'd)

7777 kHz, 18-08, 1130 UTC

RMKS 04343..5
RMKS 3436 TO 3483 AR K K
R R GA
R R 1W =
4TDU U5AT N763 4NAT (Cont'd)

8073 kHz, 18-08, 1138 UTC

V BNGC (x3) DE XSV85 (x2)
HR MSG GA HR MSG GA
NR 0688 CK 268 35 0818 1622 =
TAD 3U6 3AN 3U7 TAU
773 TA7
773 353 37U 4TD NN3 445 3DU 4DT 4D6 TAD
773 TAN
773 TUA
773 TUU
773 TU3
773 TU6
773 TU7
773 35. (Cont'd)

4444 kHz, 20-08, 1357 UTC

467T 356U N5D4 N4U3 6U37 UN5A
III = NU5D 3A67 3NA4 53AD NTAU (Cont'd)
IIII = = D5NA 473N 7TU3 54UT (Cont'd)
AR K K (Other station also on this frequency, but mostly unreadable)
R AGN AGN
..W BT NU.3 K
AGN AGN
7W BT TUDN AR K (Cont'd repeat groups)
U QSY TO NR 02 K
DLR9 DE GHOQ K. VV DLR9 DE GHOQ K. VV DLR9 DE GHOQ K
QSY TO NR 02 K
DE GHOQ K
QSA 2 K AS

6775 kHz, 22-08, 1433 UTC

V SD2. DE CV6K HR SVC GA HR SVC GA =
6474/14/88/COMM/6423 AR
SVC GA =
6474/14/88/COMM/6423 AR
HR SVC GA =
6474/14/88/COMM/6423 AR
HR SVC GA =
6474/14/88/NOMM/6423 AR
HR NR 145 SR IR 145 NIL SK NIL SK

3673 kHz, 22-08, 1448 UTC

DN45 4765 U5NN 357T III = 3545 .63 UDU (Cont'd)
AR AR FJW4 FJW4 TT
R AS
VV LQH6 LQH6 DE CXD9 K
RPT K. R RPT K
R R AS
VV V DFS8 DFS8 DE CXD9 K
R AS
R R R 7ULS 7ULS K
R AS
VV V FJW4 FJW4 DE CXD9 K
R U MSG GA K
R GA K
U QSB U QSY
AVV W FJW4 K
R U QSB QSY 01 U QSB QSY 01 U QSB QSY 01
VVV FJW4 FJW4 DE CXD9 K

8073 kHz, 21-08, 0013 UTC

V BNGC (x3) DE XSV85 (x2)
HR MSG GA PSE CY
NR 0697 CK 149 35 0821 0720
TUA 3U4 3A4 TAU
773 353 4T3 NN3 44D 3D6 4DT 4D6 TA7
773 353 37U 4T3 NN3 446 467 3D4 4DT 4D6 TAD
773 TAN
773 TUT
773 353 37U 4A4 NN3 445 3DU 4DT 4D6 TUA
773 TU3
773 356 4A4 NN3 445 3DU 4DT 4D6 TUU
773 356 4A4 NN3 445 3DT TTU 336 N3D 4AU NN3 435 466 3D3 4DT 4D6 TU4
773 753 357 365 4A5 NN3 447 3D6 4DT 4D3 TU4
773 755 357 365 4A5 NN3 446 3D5 4DT 4D3 TU5
773 354 36D 4UT NN3 443 3NT 4DT 4DA TU6
773 357 III
= 373 4AA NN3 446 3D4 336 N3D 4AA NN3 447 3D5 4DT 4D6 TU7
773 356 4AA NN3 446 3D3 4DT 4D6 TUN
773 357 373 4AA NN3 436 467 3D4 4DT 4D6 T3T
773 T3A
773 T3U
773 T33
773 357 373 4AA NN3 446 3D3 4DT 4D6 AR (0026z)
A HR 7G GA
NR 0698 CK 52 35 0821 0735 =
TTD N5U TUA N53 TT6 N54 7TT TT5 746 N65
6T5 6T6 6TA TA5 N65 6T5 6AT TT5 6A4 ANU
6A5 U3T 6A6 N45 6A7 T4D 6U4 3TT 74D (0031z)
HR 21W OEEEE HR 21W GA
6A5 U3T 6A6 N45 6A7 T4D 6U4 3TT 74D 33A
N46 D47 U5D D44 N3D 635 4UT DAU U56 N35
DA5 TU4 DAA D5D NU7 DD3 6A4 UT4 6A5 UU4
6A7 T45 AR
MSG AGN NR 0697 CK 149 35 0821 0720 =
TUA 3U4 3A4 TAU
773 353 4T3 (Cont'd) AR
(Switched to voice at 0052z)

8073 kHz. 21-08, 1143 UTC

V BNGC (x3) DE XSV85 (x2)
HR 7G SC A NR
NR 0699 CK 67 35 0821 1616 =
TTD N5U TUA N53 7TT TT6 746 N65 6T5 6T6 6TA TA5 NN6 56T 56A TTA 46
A4A N56A5 UU4 6A6 N45 6A7T466 43TT7466UUTT3N34TT5T6354UTDAUD
D3T TU4 DAA D5D NU7 .36 A4U AU6 A5U U46 A7T 4DN U66 T57 77T AU7 73T
U47 73T U57 73TU6773 TUN 773 N35 436 DTU U56 77T 7U5 AR 7G AGN
NR 0699 CK 67 35 0821 1616 = (Running groups together)
TTD N5U TUA N53 TAD N54 7TT TT6 746 N65 6T5 6T6 6TA TA5 N65 6T5
6ATTA46 A4A. 56A5 UU4 6A6 N45 6A7 T46 6U4 3TT 74D 6UU TT3 N34 TT5
635 4UT DAU D3T TU4 DAA D5D NU7 DD. 6A4 UAU 6A5 UU4 6A7 T4D NU6
6T5 777 TAU 773 TU4 773 TU5 773 TU6 773 TUN 773 N35 436 DTU U5D 77T
7U5 AR AR
R HR 7G GA NR
NR 0700 CK 304 35 0802 11658 = =
TUA 3U6 3AN 3U7 TAU
773 354 367 4T3 NN3 44D 3D6 335 D.. TNN3 454 3D7 4DT 4D3 TA7
773 357 365 4T3 NN3 435 466 3D4 335 N3D 4TU NN3 446 467 3D5 4DT 4D6
TAD
773 353 (Cont'd)

4444 kHz, 21-08, 1355 UTC

AUTA 75AT 7ATU 6N3U A574 7UT4
III = 3NNU 344D 5A5D 7D3A 4AT7 (Cont'd)
AR K
W = 5N3A AR K
= 3NT. AR K (Cont'd repeat groups)
III = = 7T46 NA63 ADN5 6U77 (Cont'd)

8073 kHz, 22-08, 1130 UTC: XSV85 voice callup
8073 kHz, 22-08, 1130 UTC: XSV85 digital data
8073 kHz, 22-08, 1132 UTC

V BNGC (x3) DE XSV85 (x2) (Cont'd)
HR HR MSG GA
NR NR 0704 CK 70 35 0822 1643 = =
TTD N5U TUU N53 TAD N54 7TT TTD 746 ND5
6T5 6TA TA5 N65 6T5 TA6 6A4 UTN 6A5 UUN
6A6 N5T 6A7 T45 6U4 3TT 74D 6UU TT7 NE4 TTN
635 4TA4 A7D AUD 3TN N45 (Cont'd)
AR (
MSG AGN
NR NR 0704 CK 70 35 0822 1643 BT BT (Repeats message)
AR
AHR MSG GA GA
NR 0705 CK 272 35 0822 1644 = =
TUU 3U6 3AN 3U7 TAU
773 357 373 4TU NN3 456 3D6 335 N3D 4T3 NN3 454 3D7 4DT 4D3 TA7
773 357 373 4A4 NN3 446 3D4 4DT 4D6 TAD
773 TU3
773 353 4AN NN3 445 3DT TTU 4DT 4D6 TAN
773 TUT
773 TUA
773 356 4AN NN3 445 3DU 4DT 4D6 TUU
773 357 373 4AN NN3 435 466 3D3 4DT 4D6 TU4
773 755 354 373 4AN NN3 446 3D3 4DT 4D6 TU4
773 753 354 367 4AN N3447 46D 3D6 4DT 4D6 TU5
773 354 37T 4UT NN3 455 3DD 335 N3D 4AN III BT NN3 454 3D7 4DT 4D3 TU6
773 354 367 4AA NN3 447 46D 3D5 4DT 4D6 TU7
773 753 TUN
773 353 373 4AA NN3 446 467 3D5 4DT 4D6 TU7
773 755 T3T N34 T33
773 373 4AA NN3 446 3D4 4DT 4D6 3UD TU.
773 357 373 4T3 NN3 454 3D7 335 N3D 4A4 NN3 447 3D5 DT 4D3 TA7
773 353 4AA NN3 446 3D3 4DT 4D6 TU4
773 4AN NN3 446 3D3 4DT 4D6 TU5
773 354 367 4AU NN3 456 3D6 335 N3D 4AA NN3 446 467 3D4 4DT 4D6 TU6
773 TU7 III = =
773 353 37 NNN3 435 466 3DT TTU 4DT 4D6 TUN N34 T33
773 353 37U 4AA NN3 446 3D3 4DT 4D6 476 3UN TAU
773 357 373 4AU NN3 447 3D5 335 N3D 4AA NN3 446 3D3 4DT 4D6 TU4
773 TU6
773 TU7
773 TUN N34 T33
773 357 373 4AA NN3 435 466 3DT T.U 4DT 4D6 TU5
773 357 373 4AA NN3 446 3D3 4DT 4D6 476 AR AR
(Switched to voice - 1210z)

3880 kHz, 24-08, 1845 UTC

ND4T NA7T 6576 7AD3 TU64 AT36
III = 3475 (Cont'd)
III = 76T4 (Cont'd)
III = 564A 3547 AN6T 564. DANT T6N5 63UU D564 TTTT TTTT (Cont'd)
III = D4AD 4NUA D3T5 7TA4 UND3 UN45 755U D644 TTTT TTTT (Cont'd)
III = D4AD 4NUA D3T5 7TA4 UND3 UN45 755U D644 TTTT TTTT U34N
(Appears to be same as previous 100 groups)
III = D44N 4NTA D3U5 7TA4 AN34 5AN5 75DU D6T4 TTTT TTTT U34D (Cont'd)
AR AR

55555 kHz, 24-08, 1313 UTC

7G NR 48/CK CK 79 32 0824 1940 RMKS R464 TO .466 TO 7358 TO A EEEEE
RMKS R564 TO 1466 TO 7368 TO Y4.4 TO D464 TO .464 K
= N4C.. UDAD 3386 667T T (Cont'd)
A AGN
T6A3 D5A. U.D3

8073 kHz, 23-08, 1130 UTC: XSV85 voice callup
8073 kHz, 23-08, 1130 UTC: XSV85 digital data
8073 kHz, 23-08, 1132 UTC

V BNGC (x3) DE XSV85 (x2)
HR 7G GA NR 0708 CK 227 EEEEE
NR 0708 CK 227 35 0823 1634 = =
TU3 3U6 3AN 3U7 TAU
773 353 373 4A6 NN3 447 46D 3D5 4DT 4D6 TA7
773 353 37U 4AN NN3 435 3D4 335 N3D 3DT TTU 4DT 4D6 TAD
773 TU3
773 356 4AN NN3 445 3DU 4DT 4D6 TAN
773 TUT
773 TUA
773 356 4AN NN3 445 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TUU
773 357 373 4AU NN3 435 466 3D3 335 N3D 3DT TTU 4DT 4D6 TU4
773 353 37U 4AU NN3 446 3D5 335 N3D 3D3 4DT 4D6 TU5
773 357 373 4AA NN3 456 3D7 335 N3D 4AA NN3 447 3D6 III = = 4DT 4D3 TU6
773 357 374 4AA NN3 447 474 43D 335 N3D 4AA NN3 446 474 43D 3D4 4DT
4D5 TU7
773 T3T
773 T3A
773 T3U
773 T33
773 357 374 4AA NN3 446 474 43D 3D4 4DT 4D5 TUN
773 353 37U 4AA NN3 446 467 3D4 4DT 4D6 3UD TAU
773 353 37U 4A5 NN3 435 3DT TTU 4DT 4D6 TU4
773 353 4AT NN3 435 466 3D3 4DT 4D6 TU5
773 357 373 4AA NN3 446 467 3D4 335 N3D 3D3 4DT 4D6 TU6
773 TU7
773 357 374 4AA NN3 446 474 43 3D3 III = = 4DT 4D5 TUN N34 T33
773 357 373 4AA NN3 446 3D3 4DT 4D6 476 3UN TU6
773 TU7
773 TUNN34 T33
773 N47 3UD 476 AR AR
A HR MSG GA
NR NR 0709 CK 65 35 0823 1638 = =
TTD N5U TU3 N53 TAD N54 7TT TAT 746 6T5
6T6 6TA TA5 6T5 6AT TA6 6A4 U4T 6A5 U37
6A6 N6T 6A7 T4T 6U4 3TT 74D 6UU TAA N34
TA3 635 4TU DAU D3T N45 U56 N35 DA3 TU4
DAA D5D NU7 DD3 6A4 U7D 6A5 U7U 6A7
T45 NU6 6T5 777 TAU 773 TU5 773 TU6 773
N35 436 DTU U5D 77T 7U5 AR
A HR 7G AGN NR 0708 CK 227 35 0823 1634 =
(Repeats message)

8073 kHz, 24-08, 1146 UTC, i.p.

AR AR
7G AGN NR 0712 CK 128 25 0824 1553 =
TU4 3U6 3AN 3U7 TAU
773 356 37U 4T3 NN3 435 3DT TTU 4DT 4D6 TA7
773 TAD
773 TU3
773 356 4AU NN3 445 3DU 4DT 4D6 TAN
773 TUT
773 TUA
773 35U 4AN NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TUU
773 353 37U 4AA NN3 445 3DU 4DT 4D6 TU4
773 357 373 4AA NN3 445 3DT TTU 4DT 4D6 TU5
773 353 373 4AA NN3 446 3D4 4DT 4D6 TU6
773 TU7
773 TUNN34 T33
773 357 374 4AA NN3 446 474 43D 3D4 4DT 4D5 3UD TU6
773 TU7
773 III = TUN
773 357 373 4AA NN3 446 474 43D 3D3 4DT 4D5 476 3UN TU6
773 357 373 4AA NN3 435 474 .3D 3DT TTU 4DT 4D5 476 AR
(Switches to voice at 1155 UTC)

10180 kHz, 24-08, 1258 UTC

C 2/..CL/2.0/Z/4..5/47.9 AR
SVC GA/1002100 RMKS 4..6 .. 78.6 = COMU ../869.82/ ../78..AR
000 RMKS 4... .. 8.6 = COM../243...98/2..99.889/ AR HR WK ... K

8073 kHz, 25-08, 0011 UTC

MSG AS = /MSG AGN
NR 0713 CK 65 35 0625 0711
MSG AGN NR 0713 CK 65 35 0625 0711 ==
TU5 3U4 3A4 TAU
773 353 37U 4A5 NN3 445 3DU 4DT 4D6 TA7
773 TU4
773 353 37U 4AU NN3 445 3DU 4DT 4D6 TAD
773 TAN
773 TUT
773 TUA
773 TU3
773 356 4AU NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TUU
773 353 37U 4AA NN3 445 3DU 4DT 4D6 TU5
773 357 373 4AA NN3 446 3D3 4DT 4D6 TU6
773 TU7
773 TUN N34 T33
773 357 374 4AA NN3 446 4T 4.. 3D 3D4 4DT 4D5 AR AR
(Switched to voice at 0019 UTC)

8888 kHz, 25-08, 0030 UTC

AA AA EEE A 7NPE 9 EEEEE
A 7NPE QV5 EEEEE A 7NPE QV5B V
MSG NR E E E EEEEE A 7NPE QV5B V
7NPE (x3) T
= = = //.. ? III HEEEEEEE III
EEEE QSY TO NR 07 K

5555 kHz, 26-08, 1701 UTC

/CCK CK 199 32 0826 2210 RMKS =
5680 TO 5... /5376/5646/5616/5366/5335/5339/5681/
E6 EEEEE

5588 kHz, 26-08, 1036 UTC

7U7U 7N3N TUT6 D5D6
III TU6T 354A 7T56 (Cont'd)
III DN7T AR
VVV MSG NR 104 CK 301 44 0826 1830 =
3U4T 5A74 4UTN D634 6475 37AT 35N4 D74N TT4N TTTU NATD (Cont'd)
III DN7T AR

8073 kHz, 27-08-2015, 1130 UTC, XSV85 voice callup
8073 kHz, 27-08-2015, 1132 UTC, XSV85 data traffic
8073 kHz, 27-08-2015, 1138 UTC

V BNGC (x3) DE XSV85 (x2)
HR 7G GA PSE CY/ NR
NR 0718 CK 246 35 0827 1602 =
TU7 346 3AN 347 TAU
773 TA7
773 354 (Cont'd)

8888 kHz, 28-08, 1055 UTC

HB 005C EEEE
NR 00..CCK .30 28 0640 RMKS 73.16 TO 3488 TO .316 K K
1W = = = 1W = = = 1W = = = 1W 1W = =
7D46 .365 A345 36N4 (Cont'd)
AR

7777 kHz, 26-08, 1100 UTC

05 05
SIII = =
05 M MSG NR 01 K0E1 ?
05 05 =
D43A N76D 7NDA T456 UD37 U5N6 UN7T UUN7TU53AT45374A 66TA ? D6TN
UNTA 54AU 3567 U643 (Cont'd)
R R R
05 05 E 05 05 05 (Cont'd)
D43A N76D 7NDA T456 UD3 (Started to repeat msg)
05 05 (Cont'd)
VVV BNGC (x3) DE XSV85 (x2) (Cont'd)
= S G
D43A N76D 7NDA T456 UD37 U5N6 U53A T453 T64A D6TN
UNTA 54AU 3567 U643 D3T4 N5TU 7DA3 75DA N476 653A
7DNT UT36 7D5A 5T4N 4U73 U6AN 7UN4 D65T 4AD3 TADN
TU73 365D N45T 75D3 6U4D A437 AT67 NAU6 N45U 4T75
D56N N3TA A46N 3D56 U7DT U736 A4DU UTA3 5N47 A7DN
7N43 6UTA 56TA D3T4 675U NU35 A6N4 A3T5 4DU7 7DNT
4365 764D 547T AU4N 6NUA D53N 3TU 7A5 346A TU67 DN3T
74DT AUDN TUA3 4T56 6U5A 4A67 5N3D 534U TA5U N647
43U5 TDA6 73DU D5A6 7A6D N634 7T4U T53N 75D6 6734
6AD7 NTAU NU3D D4N5 TUA4 4NAT U5T3 753N AR AR
33 =
D43A N76D 7NDA T456 UD37 (Repeats message)

8073 kHz, 26-08-2015, 0001 UTC, voice callup
8073 kHz, 26-08-2015, 0003 UTC, XSV85 data traffic
8073 kHz, 26-08-2015, 0007 UTC

V BNGC (x3) DE XSV85 (x2)
HR 7G GA PSE CY
NR NR 0715 CK 109 35 0826 0710 =
TU6 3U4 3A4 TAU
773 357 373 4AA NN3 445 474 437 3DU 4DT 4D5 TA7
773 TUU
773 TU4
773 357 373 4AA NN3 445 3DU 4DT 4D6 TAD
773 TUA
773 TU3
773 353 37U 4TD NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TAN
773 TUT
773 356 4TD NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 TU5
773 357 373 4AA NN3 435 466 3D3 4DT 4D6 TU6
773 TU7
773 TUN
773 357 374 4AA NN3 446 474 43D 3D3 4DT 4D5 T3T
773 T3A
773 T3U
773 T33
773 357 III = 373 4AA NN3 445 474 437 3DU 4DT 4D5 AR
MSG AGN
NR 0715 CK 109 35 0826 0710 =
TU6 3U4 3A4 TAU (Repeats message)
AR
(Switched to voice at 0034 UTC)

8888 kHz, 28-08, 1033 UTC

EEEE3 7D3G DE PW1R K
SHRM 5SHR SSRQSA 3 QSA 3 ? SH5S W SG R QAH SSS R Q
SSR QSA 3 QA5 HR QSA 3 QSA 3 ? K
ISIH T
HR QSA 3 K
TRR T5EEEEEEEEEE R M EEEEEEE TRM HR HR IEC K TRRS TRRU
HR U HR U EEEEE R IEC = 4846 T AR K
EIC 3867 T AR EEEEEEEEE EEEEEEEEEEE R R IEC = 4846 AR K
IEC 4386 7 AR K EEEEEEE IEC R R IEC HR EEEEEEE IRRIEC = HI814 6 AR K
IEC RRR HR R RR IEC 468R 1IEEEEEEE EEEEEEE

8073 kHz, 28-08, 1130 UTC, XSV85 voice callup
8073 kHz, 28-08, 1131 UTC, XSV85 data traffic
8073 kHz, 28-08, 11350 UTC

V BNGC (x3) DE XSV85 (x2) (Cont'd)
HR MSG GA PSE CY
NR 0720 CK 160 35 0828 1613 ==
TUD 3U6 3AN 3U7 TAU
773 354 367 4T3 NN3 445 474 437 3DU 4DT 4D4 TA7
773 TAD
773 354 367 4T7 NN3 445 474 437 3DU 4DT 4D4 TAT
773 TUT
773 TUA
773 TU3
773 357 373 4AD NN3 445 466 3DU 4DT 4D6 TUU
773 TU4
773 357 373 4AA NN3 435 474 437 3DT TTU 4DT 4D6 TU5
773 353 373 4AA NN3 435 466 3DT TTU 4DT 4D6 TU6
773 353 4AA NN3 445 3DU 4DT 4D6 TU7
773 TUN N34 T33
773 356 4AA NN3 434 3DT TTA N34 TTA ND4 TT5 4DT III == 4D6 3UD 3UN TAU
773 TA7
773 TU4
773 354 367 4TD NN3 445 474 43D 3DU 4DT 4D4 TAD
773 TAN
773 357 373 4AN NN3 445 474 437 3DU 4DT 4D5 TUT
773 354 367 4AD NN3 435 474 43D 3DU 4DT 4D4 TUA
773 TUU
773 357 373 4AA NN3 435 466 3DT TTU 4DT 4D6 476 AR AR (1146z)
MSG AGN
MSG AGN GA (1147z)
NR 0720 CK 160 35 0828 1613 ==
TUD 3U6 3AN 3U7 TAU (repeats message)
AR AR
(Switched to voice USB at 1157z)

6793//8060 kHz, 29-08, 0910 UTC

3N3U NAAT NNNN TTU3 73N6 7AA3 UAN7
AR
CQ 06 /005 5126 5596
MSG NR 8054 CK 93 40 0829 1710 RMKS 5686 TO 5005 5126 5596 =
5775 466T 3NDT NU37 TUA5 3TDA 3N3U NAAT NNNN TTU3 73N6 (repeating message)
AR

8073 kHz, 30-08, 1145 UTC

773 T3A
773 T3U
773 III = = T33
773 354 4AA NN3 434 3DT TTA ..4 T... TT5 4DT 4D6 3UD TUT
773 354 367 4AA NN3 446 474 43D 3D3 4DT 4D4 TUT
773 TU3
773 357 367 4AA NN3 435 474 437 3DT TTX 4DT 4D4 TUU
773 353 373 4AA NN3 435 466 3DT TTU 4DT 4D6 476 3UN TU7
773 354 367 4AA NN3 435 474 43D 3DT TTU 4DT 4D4 TUA
773 TU3
773 357 367 4AA NN3 435 474 437 3DT TTU 4DT 4D4 TU7
773 353 373 4AA NN3 435 3DT TU 4DT 4D6 476 AR AR (1150z)
7G AGN
NR 0724 CK 196 255
NR 0724 CK 196 35 0830 1546 ==
T3T 3U6 3AN 3U7 TAU
773 TA7
773 357 367 4AA NN3 445 474 43D 3DU 4DT 4D4 TAD
773 TUA
773 TU4
773 357 367 4AA NN3 445 474 437 3DU 4DT 4D4 TAN
773 TU3
773 354 (repeats message)
AR AR
(Switched to voice USB at 1202z)

8073 kHz, 28-08, 1130 UTC, XSV85 voice callup
8073 kHz, 28-08, 1131 UTC, XSV85 data traffic

V BNGC (x3) DE XSV85 (x2)
HR MSG GA PSE CY
NR 0720 CK 160 35 0828 1613 ==
TUD 3U6 3AN 3U7 TAU
773 354 367 4T3 NN3 445 474 437 3DU 4DT 4D4 TA7
773 TAD
773 354 367 4T7 NN3 445 474 437 3DU 4DT 4D4 TAT
773 TUT
773 TUA
773 TU3
773 357 373 4AD NN3 445 466 3DU 4DT 4D6 TUU
773 TU4
773 357 373 4AA NN3 435 474 437 3DT TTU 4DT 4D6 TU5
773 353 373 4AA NN3 435 466 3DT TTU 4DT 4D6 TU6
773 353 4AA NN3 445 3DU 4DT 4D6 TU7
773 TUN N34 T33
773 356 4AA NN3 434 3DT TTA N34 TTA ND4 TT5 4DT III == 4D6 3UD 3UN TAU
773 TA7
773 TU4
773 354 367 4TD NN3 445 474 43D 3DU 4DT 4D4 TAD
773 TAN
773 357 373 4AN NN3 445 474 437 3DU 4DT 4D5 TUT
773 354 367 4AD NN3 435 474 43D 3DU 4DT 4D4 TUA
773 TUU
773 357 373 4AA NN3 435 466 3DT TTU 4DT 4D6 476 AR AR
MSG AGN
MSG AGN GA (1147z)
NR 0720 CK 160 35 0828 1613 ==
TUD 3U6 3AN 3U7 TAU (repeats message)
AR AR
(Switched to voice USB at 1157z)

8073 kHz, 30-08, 0001 UTC, XSV85 voice callup
8073 kHz, 30-08, 0002 UTC, XSV85 data traffic
8073 kHz, 30-08, 0005 UTC

V BNGC (x3) DE XSV85 (x2)
HR MSG GA PSE CY
NR 0723 CK 117 35 0830 0713 =
T3T 3U4 3A4 TAU
773 TAN
773 354 367 4AT NN3 445 474 437 3DU 4DT 4D4 TA7
773 TAD
773 TUT
773 TU4
773 755 357 367 4AA NN3 435 474 43D 3DT TTU 4DT 4D4 TUA
773 TU4
773 753 357 373 4AT NN3 445 474 437 3DU 4DT 4D6 TU3
773 357 367 4AA NN3 446 474 43D 3D3 4DT 4D5 TUU
773 353 37U 4AA NN3 446 3D3 4DT 4D6 TU4
773 TU6
773 353 37U 4AA NN3 445 3DU 4DT 4D6 TU7
773 TUN
773 356 4AA NN3 445 3DU 4DT 4D6 T3T
773 T3A III ==
773 T3U
773 T33
773 35U 4AA NN3 434 3DT TTA N34 TTA ND4 TT5 4DT 4D6 AR AR
MSG AGN
7G AGN NR NR 0723 CK 117 35 0830 0713 ==
T3T 3U4 3A4 TAU (repeats message)
AR AR AR
(Switched to voice USB at 0023z)

3330 kHz, 31-08, 1257 UTC
CQ 63 RMKS 9358 TO 3648 UGT COMM SVC =
78/3648/2130/23.NR/9358 981Z ZK
EEEE /3648/2130/23.NR/9358 AR

8888 kHz, 30-08, 0034 UTC

94 8439 3859 =
37N3 G 3D7N 37N NNN
MSG NR 11 10 CK E
MSG NR 01 CK 10 23 1212 0112 =
AU3 AU34 AU34 AU34 AU34 AU34 AU34 AU34 AR
MSG NR 111 CK 77 01 1234 0323 =
67DN 67DN 67DN 67DN 67DN AR
MSG NR 01 CK 10 23
MSG NR 111 CK 77 01 1234 0323 =
67DN 67DN 67DN 67DN 67DN AR
FM 67DN AR 67DN AR
MSG NR 01 CK 1
NR 1010 CK (appears to be another station)
MSG NR 01 CK 10 23 1212 0112 =
AU3 AU34 AU
R OK ... R GA
34 AU34 AU34 AU34 AU34 AU3
HR 7G GA K
R FM AU34 AU34 AU34 AR
AA T E VA A 34 E A T 43A T34
E U 43A A34? V E U 43A A34 V
43A 43A 43A DE A34 A34 V
K6EN D3MR V K6EN K6EN K63N DE D3MR D3MR V
N5 E A N5 E A N5 N5 N5 N5 E A N5 E A N5
E T E T X Y XY.5 XYE T N5 X Y D E E T X Y Z T E
A XYZ 5 XYZ 5 XYZ5 XYZ5 DE N
E A DF4J D3MR V U FJ4B D4MR V
3 IN T9 D3MR V
DF4J DF4J DF4J DE D3MR D3MR K
FJ4B FJ4B FJ4B DE D4MR D4MR K
SNT9 SNT9 SNT9 DE D3MR D3MR V
DF4J DF4J DF4J DE D3MR D3MR V
DF4J VV VV
F NR 12 DN /////EX 1234 K 9 === // === F = FM X
//////// FF === // K === X T F / / DN///// = / = //////////
= 4UN5 5734 5A3D N3T7 D4 =
4UN5 5 = 4UN5 5734 5A3D N3T7 AS
= ANE VVV
MSG NR 01 CK 30 80 0330 1030 =
4UN5 5734 5A3D N3 E
= WMLX E
= 4295 5734 51IE
= 4UN5 5734 5A3.. 3T7 D4AU NAAD U7A5 3N.A 334A 6T4T
35N7 4574 6347 66D7 DUDA 53EEE
= TTAN 5774 NNNU 73UA T65T 55A6 U333 77D5 7AU5 N6A6
T7U3 AS
FM T7U3 3AUU NSA5 AU37 3.NA U5TT ADN.
5354 A567 DU3T 7534 U3N5 ASUA 53TN 5UE
= 7T3D 4A6U 5N6A 7N3T 4U5D 7N4A 5T6D 3U4N 5A6U 7EE
= 4UN5 5TE
VVV MSG NR 22 CK 10 72 0123 11.3 =
2Y3P N9DC ..3E JP0N IU54 37JW OV9T ZP5N 6NVE GSCJ AR
W... QSA SK GB
HR ZNN SK HR ZNN SK NPT GB NIL NIL NIL
NPT PBL QSK QRX
.212
E MSG NR E QTR
QE EII NPT DATE 1 TIME EIG
NPT E RE QSK
E QSY SHR
MSG CY
MSG PSE CY
AR XYZ XYZ 5
RD YH U

8889 kHz, 30-08, 0926 UTC

MSG GA PSE CY
NR 0723 CK 117 35 40 .9 III
07 EEEE
NR 0723 CK 3
NR 0723 CK 117 35 067 EEEEEEEEE 0830 0713 =
T3T 3.6 3AN 3U7 TAU
773 TA7
773 357 367 4A =
(Appears to be a repeat of the XSV85 message sent at 0001z on 8073, but on closer examination, although the message number is 0723, the few groups sent are identical to those sent in message 0724 sent on the 1100z sked on 8073)

3642 kHz, 31-08, 1502 UTC

VVV HR SVC NR 5383 7222 81015 333..8393714063
FM 3400091594029513309SWM
FM 29FE EEEEE /EEEE =
CL/330/Z = /4306.4000 AR QSL ? HR WK NR 45

Voice and data traffic on 8073 kHz

01-08, 0020 UTC	XSV85 voice traffic
02-08, 0001 UTC	XSV85 voice traffic
02-08, 0003 UTC	XSC85 4+4 QPSK 75/1000 LSB data
02-08, 0028 UTC	XSV85 voice traffic
05-08, 0019 UTC	XSV85 voice traffic
06-08, 0018 UTC	XSV85 4+4 QPSK 75/1000 LSB data
06-08, 0019 UTC	XSV85 voice traffic
06-08, 1214 UTC	XSV85 voice traffic
10-08, 1152 UTC	XSV85 voice traffic
12-08, 0001 UTC	XSV85 voice callup: “lin-hai (or ling-hai) from 526 – we have a message for you. Prepare to copy”; into 4+4 QPSK 75/1000 LSB data, followed by Morse.
13-08, 1148 UTC	XSV85 voice traffic
21-08, 0052 UTC	XSV85 voice traffic
21-08, 1130 UTC	XSV85 4+4 QPSK 75/1000 LSB data
22-08, 1130 UTC	XSV85 voice callup
22-08, 1130 UTC	XSV85 4+4 QPSK 75/1000 LSB data
22-08, 1210 UTC	XSV85 voice traffic
23-08, 1130 UTC	XSV85 voice callup
23-08, 1130 UTC	XSV85 4+4 QPSK 75/1000 LSB data
24-08, 1155 UTC	XSV85 voice traffic
24-08, 0019 UTC	XSV85 voice traffic
26-08, 0001 UTC	XSV85 voice callup
26-08, 0003 UTC	XSV85 4+4 QPSK 75/1000 LSB data
26-08, 0034 UTC	XSV85 voice traffic
26-08, 1130 UTC	XSV85 voice callup
26-08, 1132 UTC	XSV85 4+4 QPSK 75/1000 LSB data
26-08, 1202 UTC	XSV85 voice traffic
27-08, 1130 UTC	XSV85 voice callup
25-08, 1132 UTC	XSV85 4+4 QPSK 75/1000 LSB data
28-08, 1130 UTC	XSV85 voice callup
28-08, 1131 UTC	XSV85 4+4 QPSK 75/1000 LSB data
28-08, 1157 UTC	XSV85 voice traffic
30-08, 0001 UTC	XSV85 voice callup
30-08, 0002 UTC	XSV85 4+4 QPSK 75/1000 LSB data
30-08, 0023 UTC	XSV85 voice traffic
30-08, 1202 UTC	XSV85 voice traffic

Notes:

- Several plain text messages were received. One in pinyin and the other mentions radio equipment. The plain text messages are in red.
- XSV85 starts its transmissions with a voice announcement, followed by 4+4 QPSK 75/1000 LSB data and then into Morse. The transmission often ends with voice traffic.



UM01 - CQ station

Not heard in August.



UM10 - 10-minutes net

6793 kHz, 05-08, 0955 UTC	JATD (new callsign and freq.)
6793 kHz, 06-08, 0028 UTC	JATD
6826 kHz, 07-08, 0155 UTC	ZYVM (new callsign and new freq.)
3343 kHz, 07-08, 2003 UTC	LH5N (new callsign)
6826 kHz, 08-08, 1001 UTC	ZYVM
3343 kHz, 08-08, 1701 UTC	LH5N
3541 kHz, 10-08, 1955 UTC	HDNA (new callsign and new freq.)
3861 kHz, 10-08, 1959 UTC	LH5N //3343 kHz (new // freq.)
3541 kHz, 13-08, 1656 UTC	HDNA
3860 kHz, 13-08, 1702 UTC	LH5N //3343 kHz
3343 kHz, 13-08, 1656 UTC	LH5N //3860 kHz
6826 kHz, 13-08, 2235 UTC	ZYVM
3541 kHz, 14-08, 1557 UTC	HDNA
3343 kHz, 14-08, 1602 UTC	LH5N //3860 kHz
3860 kHz, 17-08, 1731 UTC	LH5N //3343 kHz
3343 kHz, 18-08, 1459 UTC	LH5N
6826 kHz, 19-08, 1005 UTC	ZYVM
3343 kHz, 19-08, 1755 UTC	LH5N //3860 kHz
6826 kHz, 23-08, 1000 UTC	ZYVM
6825 kHz, 24-08, 1132 UTC	LH5N (New freq. for this callsign)
3343 kHz, 26-08, 1557 UTC	LH5N //3860 kHz
3343 kHz, 29-08, 1633 UTC	LH5N
6826 kHz, 29-08, 0958 UTC	ZYVM
6826 kHz, 29-08, 2302 UTC	ZYVM
3343 kHz, 29-08, 1703 UTC	LH5N
3541 kHz, 31-08, 1458 UTC	HDNA
3343 kHz, 31-08, 1457 UTC	LH5N

DIGITAL MODES



HM01

Dirección General de Inteligencia

11435 kHz, 18-08, 1601 UTC

Radio Havana broadcast. Should be HM01. Off at 1604 UTC and into HM01 groups at 1607 UTC: 13071 80501 23842 03871 56416 26378

M42 & X06



Modes:

**Various digital modes, CW,
Tones (Mazenska / Mazielka)**

Russian Government & Intelligence



M42 – various modes

9140 kHz, 11-8, 0915 UTC, FSK 100/500

RUU70: Russian PtP station. Crypto link to RRF30

M42b – FSK 50/500

9045 kHz, 21-08, 0504 UTC

Duplex CW contact OK QRV QTC1 ZCC ZVP into RTTY transmitting 5FG message using =50= separator

M42c – FSK 200/500. Frequencies mentioned are in USB = center frequency -2 kHz

17480/15965/13394 kHz, 01-08, 1200/1210/1220 UTC	RYRYRY 5761 00000+++++++162)
15929/13450/11091 kHz, 01-08, 1810/1820/1830 UTC	RYRYRY 5761 00000+++++++162)
17480/15965/13394 kHz, 08-08, 1200/1210/1220 UTC	RYRYRY 5761 00000+++++++162)
15929/13450/11091 kHz, 08-08, 1810/1820/1830 UTC	RYRYRY 5761 00000+++++++162)
17480/15965/13394 kHz, 15-08, 1200/1210/1220 UTC	RYRYRY 5761 00000+++++++162)
10826/8142/5801 kHz, 20-08, 1900/1910/1920 UTC	RYRYRY 5761 00000+++++++162)
17480/15965/13394 kHz, 22-08, 1200/1210/1220 UTC	RYRYRY 5761 00000+++++++162)

M42d – FSK 200/1000. Frequencies mentioned are in USB = center frequency -2 kHz

Link 16404 / 16405

17467/15909/13580 kHz, 12-08, 0800/0810/0820 UTC

Block No 0 : Total Message Size 20 blocks : This transmission contains one message.

Block No 1 : Link ID 16405 : 11th of month : Msg Number 222 : Msg Type 07145 : Group Count (?) 118
37448 19817 18631 32926 11934 33806 14527 45246

13580 kHz, 27-08, 0820 UTC

Block No 0 : Total Message Size 51 blocks : This transmission contains 2 messages.

Block No 1 : Link ID 16405 : Corrupt Date : Msg Number 222 : Msg Type 07145 : Group Count (?) 118
37448 19817 18631 32926 11934 33806 14527 45246

Link 20492

14461/12194 kHz, 12-08, 0925/0935 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 20492 : 12th of month : Msg Number 065 : Msg Type 07145 : Group Count (?) 4
64292 00000 00000 03583 37104 02775 00893 25624

Link 20501**17426/15661/13422 kHz, 02-08, 1530/1540/1550 UTC**

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 20501 : 2nd of month : Msg Number 127 : Msg Type 07145 : Group Count (?) 4
39180 00000 00000 03795 12857 36159 00893 60994

17429/15840/13406 kHz, 04-08/11-08, 1650/1700/1710 UTC

Block No 0 : Total Message Size 24 blocks : This transmission contains one message.

Block No 1 : Link ID 20501 : 7th of month : Msg Number 142 : Msg Type 07145 : Group Count (?) 148
49584 29397 23050 15321 16418 36546 05944 04742

17426/15661/13422 kHz, 09-08/10-08/12-08, 1530/1540/1550 UTC

Block No 0 : Total Message Size 24 blocks : This transmission contains one message.

Block No 1 : Link ID 20501 : 7th of month : Msg Number 142 : Msg Type 07145 : Group Count (?) 148
49584 29397 23050 15321 16418 36546 05944 04742

17426/15661/13422 kHz, 16-08, 1530/1540/1550 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 20501 : 16th of month : Msg Number 130 : Msg Type 07145 : Group Count (?) 4
39180 00000 00000 01422 12857 01693 00893 09720

17429/15840/13406 kHz, 18-08, 1650/1700/1710 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 20501 : 18th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
39180 00000 00000 03085 12857 36464 00893 03940

17426/15661/13422 kHz, 23-08, 1530/1540/1550 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 20501 : 23rd of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
63124 00000 00000 01064 16418 34974 00893 48443

Link 24584**9239/7782/6779 kHz, 09-08, 2000/2010/2020 UTC**

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 24584 : 9th of month : Msg Number 037 : Msg Type 07145 : Group Count (?) 4
01380 00000 00000 01034 30092 35094 00893 41393

Link 32799**18761/16046/14389 kHz, 04-08/11-08/12-08, 1400/1410/1420 UTC**

Block No 0 : Total Message Size 24 blocks : This transmission contains one message.

Block No 1 : Link ID 32799 : 7th of month : Msg Number 092 : Msg Type 07145 : Group Count (?) 148
13284 08583 24428 36788 21819 34890 07111 56210

18761/16046/14389 kHz, 18-08, 1400/1410/1420 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 32799 : 18th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
50540 00000 00000 03233 09187 33665 00893 27151

16046/14389 kHz, 25-08, 1400/1410/1420 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 32799 : 25th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
55564 00000 00000 02051 09187 35872 00893 48153

Link 32816**14845 kHz, 19-08, 0610 UTC**

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 32816 : 19th of month : Msg Number 142 : Msg Type 07145 : Group Count (?) 4
48220 00000 00000 03303 59615 35583 00889 62611

Link 32821**16287/14459/12174 kHz, 01-08, 2100/2110/2120 UTC**

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 32821 : 1st of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
39180 00000 00000 02797 13740 36001 00893 45324

16287/14459/12174 kHz, 15-08, 2100/2110/2120 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 32821 : 15th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
63124 00000 00000 00523 16767 32930 00893 35155

16287/14459/12174 kHz, 22-08, 2100/2110/2120 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 32821 : 22nd of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
34156 00000 00000 01618 13740 34362 00893 63471

Link 36882**15613/14751/13351 kHz, 08-08/09-08, 1100/1110/1120 UTC**

Block No 0 : Total Message Size 35 blocks : This transmission contains one message.

Block No 1 : Link ID 36882 : 7th of month : Msg Number 055 : Msg Type 07145 : Group Count (?) 224
33484 11443 11643 04326 37098 00190 43048 45591

15613/14751/13351 kHz, 15-08, 1100/1110/1120 UTC

Block No 0 : Total Message Size 57 blocks : This transmission contains one message.

Block No 1 : Link ID 36882 : 13th of month : Msg Number 057 : Msg Type 07145 : Group Count (?) 128
29820 63155 28344 06480 31234 39946 19548 46305

13351 kHz, 29-08, 1120 UTC

Msg nr 060/28th Type 07145 on Link 36882.

30417 14803 40411 06958 28573 02767 42447 54083

Link 40988**15944/13559/11146 kHz, 14-08, 0600/0610/0620 UTC**

Block No 0 : Total Message Size 21 blocks : This transmission contains one message.

Block No 1 : Link ID 40988 : 11th of month : Msg Number 142 : Msg Type 07145 : Group Count (?) 131
45748 13425 18103 29295 16071 33272 40940 03299

Link 45057**16184/14569/12193 kHz, 08-08/09-08/22-08, 0900/0910/0920 UTC**

Block No 0 : Total Message Size 32 blocks : This transmission contains one message.

Block No 1 : Link ID 45057 : 7th of month : Msg Number 185 : Msg Type 07145 : Group Count (?) 214
58368 22179 21698 04850 59621 00854 28696 00651

Link 45075**15936/13552/11459 kHz, 05-08, 0800/0810/0820 UTC**

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 45075 : 5th of month : Msg Number 135 : Msg Type 07145 : Group Count (?) 4
06088 00000 00000 03839 26649 03433 00893 35726

15936/13552/11459 kHz, 12-08, 0800/0810/0820 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 45075 : 12th of month : Msg Number 062 : Msg Type 07145 : Group Count (?) 4
38712 00000 00000 01969 29748 35300 00893 37001

Link 45079**12062/10321/8022 kHz, 03-08, 0400/0410/0420 UTC**

Block No 0 : Total Message Size 24 blocks : This transmission contains one message.

Block No 1 : Link ID 32799 : 7th of month : Msg Number 092 : Msg Type 07145 : Group Count (?) 148
13284 08583 24428 36788 21819 34890 07111 56210

18761/16046/14389 kHz, 11-08, 1400/1410/1420 UTC

Block No 0 : Total Message Size 24 blocks : This transmission contains one message.

Block No 1 : Link ID 32799 : 7th of month : Msg Number 092 : Msg Type 07145 : Group Count (?) 148
13284 08583 24428 36788 21819 34890 07111 56210

Link 41018

Not reported

Link 45114 / 45115**17443/15939/13318 kHz, 08-08/09-08, 0800/0810/0820 UTC**

Block No 0 : Total Message Size 23 blocks : This transmission contains 3 messages.

Block No 1 : Link ID 45115 : 7th of month : Msg Number 035 : Msg Type 07145 : Group Count (?) 144
29968 33428 18387 24665 00643 01359 24842 60142

17443/15939/13318 kHz, 22-08/23-08, 0800/0810/0820 UTC

Block No 0 : Total Message Size 15 blocks : This transmission contains one message.

Block No 1 : Link ID 45115 : 21st of month : Msg Number 037 : Msg Type 07145 : Group Count (?) 90
02048 37268 53716 25859 06443 36700 63431 06662

Link 45136 / 45137**11074/9051/7384 kHz, 03-08, 0700/0710/0720 UTC**

Block No 0 : Total Message Size 42 blocks : This transmission contains one message.

Block No 1 : Link ID 45137 : 31st of month : Msg Number 172 : Msg Type 07145 : Group Count (?) 27
52793 41287 21115 19939 01146 40285 63883 53602

10392 kHz, 03-08, 1200 UTC

Block No 0 : Total Message Size 42 blocks : This transmission contains one message.

Block No 1 : Link ID 45137 : 31st of month : Msg Number 172 : Msg Type 07145 : Group Count (?) 27
52793 41287 21115 19939 01146 40285 63883 53602

11074/9051/7384 kHz, 04-08, 0700/0710/0720 UTC

Block No 0 : Total Message Size 54 blocks : This transmission contains 2 messages.

Block No 1 : Link ID 45137 : 3rd of month : Msg Number 175 : Msg Type 07145 : Group Count (?) 175
06552 15873 58118 18021 07583 02333 23400 00569

10392/8074/6766 kHz, 04-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 54 blocks : This transmission contains 2 messages.

Block No 1 : Link ID 45137 : 3rd of month : Msg Number 175 : Msg Type 07145 : Group Count (?) 175
06552 15873 58118 18021 07583 02333 23400 00569

11074/9051/7384 kHz, 05-08, 0700/0710/0720 UTC

Block No 0 : Total Message Size 38 blocks : This transmission contains one message.

Block No 1 : Link ID 45137 : 4th of month : Msg Number 180 : Msg Type 07145 : Group Count (?) 249
29408 23425 20748 02181 09959 00749 58813 22007

10392/8074/6766 kHz, 05-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 38 blocks : This transmission contains one message.

Block No 1 : Link ID 45137 : 4th of month : Msg Number 180 : Msg Type 07145 : Group Count (?) 249
29408 23425 20748 02181 09959 00749 58813 22007

11074/9051/7384 kHz, 06-08, 0700/0710/0720 UTC

Block No 0 : Total Message Size 61 blocks : This transmission contains 2 messages.

Block No 1 : Link ID 45137 : 5th of month : Msg Number 182 : Msg Type 07145 : Group Count (?) 201
23552 44868 38291 31676 58024 32911 39566 46206

10392/8074/6766 kHz, 06-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 61 blocks : This transmission contains 2 messages.

Block No 1 : Link ID 45136 : 5th of month : Msg Number 182 : Msg Type 07145 : Group Count (?) 201
23552 44868 38291 31676 58024 32911 39566 46206

11074/9051/7384 kHz, 07-08/10-08, 0700/0710/0720 UTC

Block No 0 : Total Message Size 31 blocks : This transmission contains one message.

Block No 1 : Link ID 45136 : 7th of month : Msg Number 187 : Msg Type 07145 : Group Count (?) 205
63796 33348 10977 16200 55182 35169 07980 53141

10392/8074/6766 kHz, 10-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 31 blocks : This transmission contains one message.

Block No 1 : Link ID 45136 : 7th of month : Msg Number 187 : Msg Type 07145 : Group Count (?) 205
63796 33348 10977 16200 55182 35169 07724 20373

11074/9051/7384 kHz, 11-08, 0700/0710/0720 UTC

Block No 0 : Total Message Size 56 blocks : This transmission contains 2 messages.

Block No 1 : Link ID 45136 : 10th of month : Msg Number 190 : Msg Type 07145 : Group Count (?) 201
35504 03972 14205 33566 58024 02961 60022 51013

10392/8074/6766 kHz, 11-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 56 blocks : This transmission contains 2 messages.

Block No 1 : Link ID 45136 : 10th of month : Msg Number 190 : Msg Type 07145 : Group Count (?) 201
35504 03972 14205 33566 58024 02961 60022 51013

10392/8074/6766 kHz, 12-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 38 blocks : This transmission contains one message.

Block No 1 : Link ID 45137 : 11th of month : Msg Number 195 : Msg Type 07145 : Group Count (?) 249
02376 20709 39067 02237 07583 03369 43272 13110

11074/9051/7384 kHz, 13-08, 0700/0710/0720 UTC

Block No 0 : Total Message Size 58 blocks : This transmission contains 2 messages.

Block No 1 : Link ID 45136 : 12th of month : Msg Number 197 : Msg Type 07145 : Group Count (?) 189
64596 39155 47390 25789 55182 35541 46738 40407

10392/8074/6766 kHz, 13-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 58 blocks : This transmission contains 2 messages.

Block No 1 : Link ID 45136 : 12th of month : Msg Number 197 : Msg Type 07145 : Group Count (?) 189
64596 39155 47390 25789 55182 35541 46738 40407

11074/9051/7384 kHz, 17-08, 0700/0710/0720 UTC

Block No 0 : Total Message Size 31 blocks : This transmission contains one message.

Block No 1 : Link ID 45136 : 17th of month : Msg Number 202 : Msg Type 07145 : Group Count (?) 203
55840 07367 31872 06663 55182 34922 02417 05364

10392/8074/6766 kHz, 17-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 31 blocks : This transmission contains one message.

Block No 1 : Link ID 45136 : 17th of month : Msg Number 202 : Msg Type 07145 : Group Count (?) 203
55840 07367 31872 06663 55182 34922 02417 05364

10392/8074/6766 kHz, 18-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 57 blocks : This transmission contains 2 messages.

Block No 1 : Link ID 45136 : 17th of month : Msg Number 205 : Msg Type 07145 : Group Count (?) 185
64740 45363 06267 02948 58024 00470 55725 40007

11074/9051/7384 kHz, 19-08, 0700/0710/0720 UTC

Block No 0 : Total Message Size 41 blocks : This transmission contains one message.

Block No 1 : Link ID 45137 : 18th of month : Msg Number 210 : Msg Type 07145 : Group Count (?) 13
12428 63158 57411 26962 09959 05788 51965 56281

10392/8074/6766 kHz, 19-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 41 blocks : This transmission contains one message.

Block No 1 : Link ID 45137 : 18th of month : Msg Number 210 : Msg Type 07145 : Group Count (?) 13
12428 63158 57411 26962 09959 05788 51965 56281

11074/9051/7384 kHz, 21-08, 0700/0710/0720 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 45137 : 21st of month : Msg Number 202 : Msg Type 07145 : Group Count (?) 4
58304 00000 00000 01787 23967 35083 09085 23580

11074/9051/7384 kHz, 24-08, 0700/0710/0720 UTC

Block No 0 : Total Message Size 42 blocks : This transmission contains one message.

Block No 1 : Link ID 45137 : 24th of month : Msg Number 217 : Msg Type 07145 : Group Count (?) 27
14040 38086 11927 00826 09959 38818 01696 10932

10392/8074/6766 kHz, 24-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 42 blocks : This transmission contains one message.

Block No 1 : Link ID 45137 : 24th of month : Msg Number 217 : Msg Type 07145 : Group Count (?) 27
14040 38086 11927 00826 09959 38818 01696 10932

11074/9051/7384 kHz, 28-08, 0700/0710/0720 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 45136 : 28th of month : Msg Number 182 : Msg Type 07145 : Group Count (?) 4
28301 00000 00000 01257 65099 36742 00893 63679

10392/8074/6766 kHz, 31-08, 1200/1210/1220 UTC

Block No 0 : Total Message Size 36 blocks : This transmission contains one message.

Block No 1 : Link ID 45137 : 28th of month : Msg Number 232 : Msg Type 07145 : Group Count (?) 237
55817 58681 07211 20562 07583 34235 52531 23090

Link 49202**15615/13372/11079 kHz, 12-08, 2200/2210/2220 UTC**

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 49202 : 12th of month : Msg Number 110 : Msg Type 07145 : Group Count (?) 4
22796 00000 00000 02762 28271 03006 00893 40251

Link 49237**13437/11136/9242 kHz, 06-08, 1330/1340/1350 UTC**

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 49237 : 6th of month : Msg Number 117 : Msg Type 07145 : Group Count (?) 4
54412 00000 00000 01005 49619 34039 00893 38902

13437/11136/9242 kHz, 13-08/14-08, 1330/1340/1350 UTC

Block No 0 : Total Message Size 24 blocks : This transmission contains one message.

Block No 1 : Link ID 49237 : 7th of month : Msg Number 047 : Msg Type 07145 : Group Count (?) 148
37620 51539 29658 17765 49619 34403 28564 01086

13437/11136/9242 kHz, 20-08, 1330/1340/1350 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 49237 : 20th of month : Msg Number 057 : Msg Type 07145 : Group Count (?) 4
20332 00000 00000 00437 47143 35083 00893 13969

Link 53277**17453/15921/13386 kHz, 05-08, 1230/1240/1250 UTC**

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 53277 : 5th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
39180 00000 00000 00305 15966 34651 00893 22541

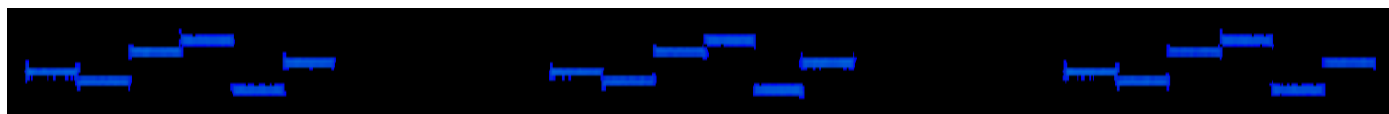
17453/15921/13386 kHz, 19-08, 1230/1240/1250 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1 : Link ID 53277 : 19th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
48508 00000 00000 00893 15966 36731 00893 01781

X06 - Mazielka

16116 kHz, 02-08, 0858 UTC, X06	Mazielka. Sequence: 134265
18660 kHz, 02-08, 1045 UTC, X06	Mazielka. Sequence: 621543
16314 kHz, 04-08, 1819 UTC, X06b.	Mazielka. Sequence: 1--6-- before XPA2
16314 kHz, 06-08, 1820 UTC, X06b.	Mazielka. Sequence: 1--6-- before XPA2
15814 kHz, 13-08, 1805 UTC, X06.	Mazielka. Sequence: 261111 before XPA2
16314 kHz, 13-08, 1805 UTC, X06.	Mazielka. Sequence: 261111 before XPA2
15814 kHz, 13-08, 1813 UTC, X06.	Mazielka. Sequence: 261111 before XPA2
16314 kHz, 13-08, 1813 UTC, X06.	Mazielka. Sequence: 261111 before XPA2
13854 kHz, 13-08, 0755 UTC, X06	Mazielka. Sequence: 521634
16153 kHz, 13-08, 0814 UTC, X06	Mazielka. Sequence: 153624
13854 kHz, 13-08, 0832 UTC, X06	Mazielka. Sequence: 521634
13506 kHz, 13-08, 1008 UTC, X06	Mazielka. Sequence: 164532
14442 kHz, 13-08, 1553 UTC, X06	Mazielka. Sequence: 564213
14442 kHz, 13-08, 1647 UTC, X06	Mazielka. Sequence: 564213
16103 kHz, 13-08, 0715 UTC, X06	Mazielka. Sequence: 645321
9106 kHz, 13-08, 1539 UTC, X06	Mazielka. Sequence: 564213
14378 kHz, 17-08, 1808 UTC, X06b.	Mazielka. Sequence: 6--1-- before XPA2
14378 kHz, 17-08, 1821 UTC, X06b.	Mazielka. Sequence: 6--1-- before XPA2
16314 kHz, 18-08, 1824 UTC, X06b.	Mazielka. Sequence: 1--6-- before XPA2
17454 kHz, 18-08, 1140 UTC, X06	Mazielka. Sequence: 325614
14631 kHz, 19-08, 0840 UTC, X06	Mazielka. Sequence: 362154



Mazielka. Sequence 325614



XPA

10868/12168/13368 kHz, 01-08, 0600/0620/0640 UTC

813 813 813 000

06953 00001 00000 10140

12187/10787/9387 kHz, 04-08, 1730/1750/1810 UTC

173 173 173 000

02225 00001 0000 10140

10868/12168/13368 kHz, 05-08/08-08, 0600/0620/0640 UTC

813 813 813 1

07665 00101 96207 14565 35822 85384 55554 84942 07693 52578
11521 09849 36952 17681 73883 52332 08777 58648 39075 71116
67567 65169 51858 13079 72679 54574 21125 87818 58656 95595
74852 50048 22275 18868 55468 97484 60425 85763 05965 56449
28974 41494 58950 22742 12322 17242 65498 12347 22889 41698
76635 07807 51801 79491 88478 51209 17053 42683 89825 56440
57403 72473 43761 93393 64379 99891 23736 45340 00448 39959
67692 91199 19806 81335 66884 61515 38598 81810 13255 40157
25177 26563 65049 07738 04887 23903 16247 49303 91847 14352
48008 66330 81959 18664 83429 20364 38528 93169 24439 03944
38344 72067 61384 61036

10868/12168/13368 kHz, 11-08, 0600/0620/0640 UTC

813 813 813 000

08748 00001 00000 10140

12187/10787/9387 kHz, 11-08, 1730/1750/1810 UTC

06454 00177 34211 62890 32052 27095 11616 19429 15284 32199
26075 62199 67004 87256 17316 45087 06153 38915 79646 76916
32441 42543 94828 54704 70198 35692 87385 12041 92714 45267
64206 30490 60490 92938 50220 71299 67097 68970 47024 35991
56279 88349 17115 77968 64036 03770 32742 94770 87152 05932
10660 66652 14432 62964 68674 85448 59130 63941 12713 34214
17854 74911 84265 65625 69577 99624 39265 56407 87812 97781
76927 66086 17736 45833 24632 22058 44458 25954 45439 58667
79334 93453 15962 11539 80428 57387 97691 66289 54089 83075
73914 00385 56250 41202 27272 26022 89412 20179 76574 65312
45688 98949 02316 84892 98034 45538 61354 50714 77474 10662
12167 95784 45419 32803 94044 85815 82253 69457 13400 04831
41392 14123 10773 49528 32243 92826 25416 70616 96618 09991
97380 58921 44804 40612 41228 68865 66997 92973 90815 65489
56164 93391 34904 50774 30053 87429 53704 22335 70733 69056
10695 88766 74077 19320 41203 00386 05071 01848 34824 10091
19307 27642 98908 87034 58283 34339 32380 51635 58439 04178
92986 42127 59358 86438 12364 07564 87978 20010 31048 12051

12187/10787/9387 kHz, 13-08, 1730/1750/1810 UTC

173 173 173 000

07583 0000 00000 10110

10868/12168/13368 kHz, 15-08, 0600/0620/0640 UTC

813 813 813 000

01721 00001 00000 10140

12187/10787/9387 kHz, 18-08, 1730/1750/1810 UTC

173 173 173 000

09599 00001 00000 10140

10868/12168/13368 kHz, 19-08/22-08, 0600/0620/0640 UTC

813 813 813 1

05802 00093 46209 99258 87277 81439 01363 51915 68305 65016

24497 60944 53564 09760 01375 99487 76551 94250 56557 17864

04507 85448 03624 63762 58447 94886 55961 19957 70542 00805

28056 92301 93776 12010 57930 79234 15188 42816 55585 76973

53854 42972 78620 41894 81874 42517 83903 76167 90229 27320

83177 44543 37319 62616 21164 15014 29727 67109 52501 29891

70157 03002 82885 28178 61385 97155 83531 34396 52112 81339

79166 67625 72974 69362 30292 65667 87717 28840 07110 32876

88015 21392 95824 70854 75039 94452 74522 17256 48186 22249

84792 50224 77847 87195 83304 14712

12187/10787/9387 kHz, 20-08, 1730/1750/1810 UTC

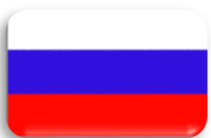
173 173 173 000

09469 00001 00000 10140

12168 kHz, 29-08, 0620 UTC

813 813 813 000

02098 00001 00000 10140



XPA2

16167/14663/13923 kHz, 01-08, 1900/1920/1940 UTC

07694 00001 00000 10140

14738/13438/12138 kHz, 02-08, 2000/2020/2040 UTC

09898 00001 00000 10140

16314/15814/14514 kHz, 04-08, 1900/1920/1940 UTC

09927 00001 00000 10140

14738/13438/12138 kHz, 02-08/09-08, 2000/2020/2040 UTC

07173 00069 38632 61045 23444 72952 45833 92292 97269 87722

93575 41710 62128 92548 86086 45578 26617 82534 01469 78722

87696 18202 89220 49827 41777 69144 79928 81383 88029 91557

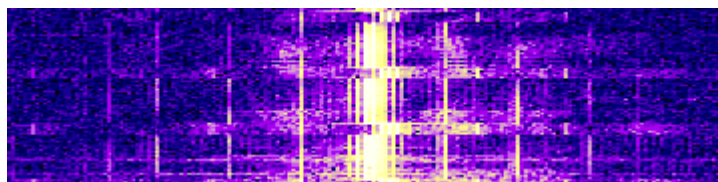
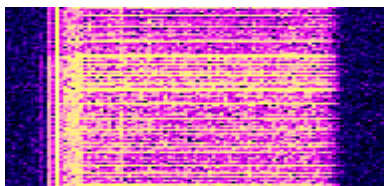
57085 32611 88306 77414 61413 79455 97885 01619 46536 85064

15887 78694 66217 30915 44574 77269 13724 46510 54767 38775

47231 51321 14918 18517 97910 16298 88293 55888 20534 69640

44943 33504 15835 07584 16798 88072 50937 00960 61544 45925

06343 52202



Noisy XPA2 transmitter

16314/15814/14514 kHz, 06-08, 1900/1920/1940 UTC

03922 00001 00000 10140

20049/18549/17449 kHz, 07-08, 0700/0720/0740 UTC

00851 00169 96320 02682 79728 99543 15976 31261 54293 70256
26665 10644 25941 46738 38675 17925 17353 07826 51091 21660
78188 22304 93136 60676 64138 87949 19596 00348 10227 39037
76169 86087 41357 14434 21462 42668 19927 69398 46050 53760
36928 37128 40304 93247 82399 18528 08547 50414 57798 61512
15014 07578 31090 41512 27737 65783 88986 41815 19275 28630
68582 61199 75693 18256 65735 10655 09361 40303 00767 03045
16973 47095 41852 70662 52077 97923 19215 43253 89227 52185
36180 90386 42409 86353 90498 26895 95053 56040 97737 28621
13165 58351 46911 96166 45671 12093 64325 86411 57397 00359
54207 31433 26813 41739 89481 31715 93083 06954 17162 36910
36868 42725 95454 03552 11058 68127 06924 29790 59342 88164
36327 26080 52274 79036 54088 10000 82599 13923 85042 97318
61079 96970 92254 75645 10377 11426 60064 00041 77417 09158
81050 97104 26331 60111 66106 10618 42814 78016 83740 24687
64291 96586 68387 16977 25153 48148 91693 55677 02117 96444
76668 37752 73364 20461 00769 85403 62833 31756 44107 67810
88399 51744

16167/14663/13923 kHz, 07-08, 1900/1920/1940 UTC

03350 00001 00000 10140

20049/18549/17449 kHz, 11-08/14-08, 0700/0720/0740 UTC

00237 00097 22164 64109 68629 19750 69608 23915 49848 42533
78076 41882 03331 96407 50437 38049 76632 30670 60093 70158
00049 12241 20027 56741 52010 26808 02286 80116 66012 82345
77709 63917 01823 96976 37526 75913 53026 99885 06816 01866
40960 16468 28488 70224 64043 81368 54124 98725 06683 69101
07754 77925 57976 40811 49034 17833 55995 90027 26658 55249
62938 15559 33924 68055 56094 51131 45176 43668 25225 76772
02855 80632 91000 25672 48503 92474 03262 53728 07888 08699
96868 64442 80288 12444 42655 62264 54492 00684 56509 68219
11181 55394 80933 77796 17554 32884 07765 54446 66183 36011

16314/15814/14514 kHz, 11-08, 1900/1920/1940 UTC

01659 00001 00000 10140

14738/13438/12138 kHz, 11-08, 2000/2020/2040 UTC

06643 00001 00000 10140

16314/15814/14514 kHz, 13-08, 1900/1920/1940 UTC

04678 00001 00000 10140

16167/14663/13923 kHz, 14-08, 1900/1920/1940 UTC

01223 00059 15063 26367 77353 85151 87019 22101 58801 18012
86780 72008 94920 02517 37201 00099 73074 55246 29892 46120
12753 97417 10244 27670 46584 77459 39798 77465 15847 83669
46875 29576 73527 18642 12476 37045 25579 08090 01541 97453
80748 42425 29112 58721 24686 77017 54617 05859 35704 15210
00351 04508 70901 65499 31459 93764 47627 34462 91278 96953
62962 04032

14738/13438/12138 kHz, 16-08, 2000/2020/2040 UTC

08631 00001 00000 10140

16314/15814/14514 kHz, 18-08/20-08, 1900/1920/1940 UTC

08548 00107 31072 07177 13807 76384 19666 47710 25139 24387
59608 31067 89564 92000 07360 93574 67532 37659 23008 81514
38392 91988 39870 95966 91237 02142 78792 65153 78390 61428
67434 04212 93367 90753 13966 57773 82846 15500 15557 08162
80183 92115 33899 49182 94130 50445 56915 56035 64715 33388
23350 49281 88633 61263 49644 68628 11902 44638 25178 79291
77859 66852 76818 31039 16367 13868 20915 22223 48162 88883
66663 64883 44619 43557 13036 44297 03003 43326 93697 37470
09190 07085 94273 98848 80875 96186 52409 70859 84018 08704
31872 75037 93372 32625 23740 09250 20309 15725 76389 29613
65306 03520 74320 78845 43911 95221 52226 59931 68997 42735

20049/18549/17449 kHz, 21-08, 0700/0720/0740 UTC

06329 00001 00000 00130

16167/14663/13923 kHz, 21-08, 1900/1920/1940 UTC

06094 00001 00000 10140

16167/14663/13923 kHz, 22-08, 1900/1920/1940 UTC

03619 00001 00000 10140

14738/13438/12138 kHz, 23-08, 2000/2020/2040 UTC

2850 00109 06220 76600 62555 08345 84233 45487 8220 77442
6142 03227 22382 14730 60364 36447 66527 32143 06784 11668
43130 12662 88178 32452 67700 05853 04128 18127 3377 41175
70410 30776 88172 0073 382 44436 12547 77332 48867 60428
87183 77044 05436 08453 08888 10812 82663 46240 04613 88838
5151 40440 21420 67264 22638 73336 70466 45666 32221 52188
66833 76681 00187 70415 40315 5423 61205 77518 36666 84716
04741 83337 12018 6335 60017 35422 28123 36615 6417 45464
13070 12062 81833 30037 80480 0874 62437 83856 10411 15005
12867 75735 76684 51822 16841 13341 67076 24624 75134 88627
64533 34531 28555 16566 15880 84365 35365 60408 83332 44102
8187 52003

16314/14514 kHz, 25-08, 1900/1940 UTC

03732 00001 00000 10140

16314 kHz, 27-08, 1900 UTC

02980 00001 00000 10140

18549/17449 kHz, 28-08, 0720/0740 UTC

09854 00001 00000 00140

14738 kHz, 30-08, 2000 UTC

03388 00001 00000 10140



Polish Intelligence
(E11 family)

Transmissions are in FSK 100Bd/625Hz or FSK 100Bd/740Hz unless indicated otherwise.
Logs of null messages can be found in the Logs Section.

6480 kHz, 03-08/06-08, 0800/0805 UTC

0434 0434 0434 0434 0434
88888 88888 00206 86752 18870 25532 77951 88671 52543 65209
46642 05495 97971 87990 23264 13108 07608 75031 98378 66141
49495 11049 32376 30674 09177 87507 62210 39839 71295 48953
47728 31398 88888 88888
00034 00034

13424 kHz, 03-08/05-08, 0845/0850 UTC

0353 0353 0353 0353 0353
88888 88888 55959 81584 47886 62716 42036 07345 19425 62587
44163 73418 66521 16753 93624 85393 36504 33112 03883 66145
80674 65630 74502 91596 57114 85825 41865 03514 14665 73942
05073 37588 75915 15655 65732 60750 15470 88888 88888
00039 00039

13537 kHz, 05-08/07-08, 0530/0535 UTC

0453 0453 0453 0453 0453
88888 88888 54749 04730 33703 71939 51847 49025 44272 70478
15577 80954 58918 57794 80961 15219 15808 14882 64952 22441
58813 64954 00578 69120 88509 72538 13112 89113 94222 21438
17688 49051 25984 88888 88888
00035 00035

14575 kHz, 04-08/07-08, 0655/0700 UTC

0684 0684 0684 0684 0684
88888 88888 14496 26705 85211 21979 01011 02686 45412 91396
55792 46020 75680 83965 53034 10465 11337 09620 00160 70517
87341 02532 09412 86339 15598 19847 82192 78531 70029 42334
21066 83707 84394 27098 04736 36422 88888 88888
00038 00038

7727 kHz, 06-08/09-08, 1305/1310 UTC

0437 0437 0437 0437 0437
88888 88888 03894 81176 58370 91691 29194 90522 71265 75279
16515 13699 29570 17061 72184 52266 44273 63463 93613 63803
66085 35604 49183 91713 72536 92961 00970 53950 74209 28613
25723 35363 74593 74968 75025 88888 88888
00037 00037

7837 kHz, 10-08, 1305/1310 UTC

0547 0547 0547 0547 0547
88888 88888 13084 36220 06468 16757 61465 49396 50722 93772
70039 89657 76213 25292 43725 18132 88656 79695 03833 64323
24095 99199 71091 37469 77638 82735 83585 75373 13687 38298
10179 28413 80150 56097 69116 88888 88888
00037 00037

14972 kHz, 14-08/16-08, 1005/1010 UTC

0877 0877 0877 0877 0877
88888 88888 03496 24338 51807 23731 31588 45931 36895 51556
13342 52318 15528 76825 69228 77958 80264 88548 34338 08658
73926 84280 50430 97961 84308 02749 15048 98023 31981 17348
91880 25001 00563 88888 88888
00035 00035

13046 kHz, 17-08/21-08, 0815/0820 UTC

0446 0446 0446 0446 0446
88888 88888 91150 73428 97019 98243 03134 36601 08823 10935
54775 64834 93756 93525 67819 85939 85238 42792 59636 25878
08816 46044 41921 95630 45805 16440 98154 13377 76927 11858
28792 92532 55356 36200 80186 19510 77087 96523 05898 88888
88888
00041 00041

16388 kHz, 17-08, 1000/1005 UTC

0765 0765 0765 0765 0765
88888 88888 83775 82400 84010 46462 23307 47741 04175 19686
91756 26159 23173 31421 36042 35801 34716 05664 54889 25612
92830 21555 67898 21584 58674 56669 99438 49833 37993 30270
42025 19974 76548 17442 99767 45244 65633 18391 65280 88888
88888
00041 00041

15690 kHz, 19-08, 1245/1250 UTC

0132 0132 0132 0132 0132
88888 88888 61414 38679 62040 74889 76177 11783 91492 87206
81813 70990 40497 72861 59371 87191 16289 83685 58924 50834
52048 48770 35544 66274 92432 52655 07554 43063 25611 62496
51435 67268 88888 88888
0034 0034

8423 kHz, 21-08, 0900/0905 UTC

0554 0554 0554 0554 0554
88888 88888 39217 21361 31251 73130 27581 22327 12452 63195
12324 16346 72820 85143 29574 18661 68479 10349 18639 70133
15222 00508 15475 72009 72986 98773 19138 45882 64588 79073
73007 82894 22869 81076 86050 88888 88888
00037 00037

13470 kHz, 25-08, 0630/0631/0635 UT (erroneously also transmitted at 0631 UTC)

0574 0574 0574 0574 0574
88888 88888 51154 02665 14706 79658 38557 88632 66526 50629
42932 68310 12569 87791 82183 55927 78491 04668 70343 19683
71559 32050 91201 31948 35438 69985 70006 09962 32334 02731
49952 28500 88888 88888
00034 00034

12067 kHz, 28-08, 1005/1010 UTC

0675 0675 0675 0675 0675
88888 88888 19762 85743 31755 52673 87886 21530 20770 26899
63148 07242 20877 47653 06477 27476 62363 28722 58713 95815
51872 15726 00463 51422 80255 20542 94608 13901 99687 47605
73020 56873 07979 20918 18450 96745 88888 88888
00038 00038



Egyptian diplomatic stations

Modes: SITOR-A 100/170 & Codan-9001

19667.7 kHz, 27-8, 1850 UTC, SITOR-A 100/170
 11408 kHz, 31-8, 2231 UTC, Codan 9001/3012 16 tone
 10820 kHz, 31-8, 2232 UTC, Codan 9001/3012 16 tone
 12230 kHz, 31-8, 2232 UTC, Codan 9001/3012 16 tone
 11033 kHz, 31-8, 2241 UTC, Codan 9001/3012 16 tone
 13522 kHz, 31-8, 2241 UTC, Codan 9001/3012 16 tone

MFA Cairo msg to Egyptian embassy Ouagadougou
 55501 Egyptian Embassy, Havana crypto msg to 99910 MFA Cairo
 55501 Egyptian Embassy, Havana crypto msg to 99910 MFA Cairo
 55501 Egyptian Embassy, Havana crypto msg to 99910 MFA Cairo
 55501 Egyptian Embassy, Havana crypto msg to 99910 MFA Cairo
 45501 Egyptian Embassy, Havana crypto msg to 99910 MFA Cairo

UTILITY ROUND-UP



Unid stations

3515 kHz, 25-08, 1115 UTC, copied by JPL: CQ CQ CQ DE R4556 PSE K

RUSSIAN MILITARY TRANSCRIPTS

Excerpts from logs submitted by JPL, Pat, Wolfgang, Tom



M32

Russian / CIS Military CW Stations

3876 kHz, 10-08, 1908 UTC

///10011 =
 AR RHI86 K
 RHI86 OK QRU K
 VV RJD52 DE RJU79 QSA . QTC K
 RJU79 775 20 10 2200 775 =
 FM RJU79
 FOR RJD52 RJD88 =
 WWHH/10180 99435 .04.6 41/97 /0914 .0250 410.. 54000 70.00 8//// 22242 00../ 2//// 8800 .0000 10016 = RJU79 K
 VV RJD52 DE RBEP QSA ? QTC K
 RBEP 129 17 10 2200 129 =
 FM RBEP
 FOR RJD52 RJD88 =
 10181 99390 10497 4179. 00506 ..280 40760 5./// 70000 22200 20000 88000 80000 10013 = AR RBEP K
 RBEP RPT 10181 K
 RBEP QRU K

3350 kHz, 10-08, 1701 UTC

DE WEGI FOR QRJ 3 K
 VXN8 DE WEGI K
 PKXR DE WEGI K
 R K

6767 kHz, 22-08, 2216 UTC

MQK8 DE TSWM QTC K

MQK8 DE TSWM QTC K

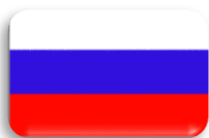
QSV K. QSV K

BK BK RPT K

TSWM 448 18 23 0102 448 =

574 =

MMMMM NCWHR FIQCV S\HFHY BPDGR S\HFHY (Cont'd)



M32a
Russian Navy
Voyenno-Morskoy Flot Rossii

8345 kHz, 18-08

---- RIT DE RJY96 QSA? K

---- RMP DE RHI99 QSA3 K. AS1 K. OK QSU1 QWH 8195 QSX 4146 K. OK QSU1 SK K. OK QYT4 QWH 6255 QSX 4225 K. QYT4 QSA? K

0600 RCV DE RCIG 431 30 18 0855 431 = SML = 62563 14016 7322303309 N06443

0606 RBES Tug Sliva (SB-921): RCV DE RBES 908 17 18 0900 908 = SML FOR RJH45 RJD38 RJE73 =2406 10268 40104 54000 70200 82500 22200 20201 18012 = + RBES K 0712Z RBES 654 52 18 1005 654 = 11111 48933 13334 73272 43948 80751

0608 RKO81 AO Lena: RCV DE RKO81 942 19 18 0900 942 = SML FOR RJH45 RJD38 RJE73 = 18061 99352 10199 41598 43201 10275 4052 54000 70312 84100 99972 00284 199// 88000 80000 = + RKO81 K RKO81 QCZ 18015 K

0646 RIT DE RMM91 QSA? QTC K RMP DE RMM91 QSA? QTC K

12464 kHz, 18-08

---- RIW DE RIS96 QSA? K

---- RMUW Tug Shakter: RCV DE RMUW QSA? K

---- RIW DE RDND 817 39 18 1145 817 = FM RAA = 45058 33860 33798

---- RCV DE RCIG 212 20 18 1527 212 = SML = 10935 55164 34689 39863

0554 RMRV Smolny (887): VVV RIT DE RMRV K

0557 RCV DE RCIG QSA? QTC KK

0621 RFH71 LS Novocherkassk (142): RCV DE RFH71 K QSA2 QYT4 QSX 8192 K

0642 RIT DE RMM91 QSA? QTC K 0648Z RMP DE RMM91 QSA? QTC K 0652Z RIW DE RMM91 QSA? QTC K

1210 RCIG 52716 18 1500 527 = SML FOR RJH45 RJE73 = 18121 993.. 101.. 42998 03202 10290 40175 54000 70000 80000 22272 299// 18012 = + RCIG K OK QRU K

1230 RCIG 111 16 19 1500 111 = SML FOR RJH45 RJE73 = 19121 99362 10113 42998 03403 10340 40163 54000 70000 80000 2226. 299// 19012 = + RCIG K. RCIG OK QRU K. RCV DE RMRV K (Positional data/speed course stripped out of RCIG message. RCIG 19121 99362 10113 2226. 36.2N 11.3E Heading West at ? Knots. Speed was either a 2 or 3. 2 = 6-10 Knots 3 = 11-15 Knots)

6948 kHz, 22-08, 2204 UTC, weather bulletin i.p.

0012 ..0001 00612 4.011 00002 00612 5MWO12 0A

50016 00006 ...12 60.16 00102 00612 5..013 =

RLO RLO RLO DE RIT RIT QTC 313 2. 23 0048 313 =

RADIOPROGNOZ 23008 03003 3.. (Cont'd)



M32b
Russian Naval Aviation
Aviatsiya Voennno-morskogo Flota Rossii

8816 kHz, 18-08

0729 RJF94 RJC38 DE 08498 QTO 0714 QRD XUMB XMWH QRE 1045 QBD 13000 K - QTH 5818 2034 QTR 0815 QBK 7000 K - QTH 5957 2838 QTR 0917 QBK 7000 K - QTH 5656 3456 QTR 1017 QBG 7000 QBD 6000 K - QQM XUMB 1053 SK

0935 26930 (AN-26 Yellow07): RJC38 RJF94 DE 26930 QTH 6622 3334 QTR 0930 QBG 5800 K - QAY XLPB 1024 QRE XLWF 1125 K

0943 RJF94 RJC38 DE 54395 QQL XLWC 0940 QBD 13400 QRE XUMO 1045 K - QQM XUMO 1039 SK

1245 26930 (AN-26 Yellow07): RJC38 RJF94 DE 26930 QTO 1230 QRD XUMO XLWF QBD 5100 QRE 1400 K - QTH 5706 3742 QTR 1310 QRE XUMO 1340 K - QQM XUMO 1350 SK

1346 RJF94 RJC38 DE 54395 QTH 6014 3734 QTR 1342 QBD 11600 QBG 220 K - QQM XLMV 1553 SK

1450 RJF94 RJC38 DE 54395 QQL ULPE 1445 QBD 9700 QRE XLMV 1855 K

1500 08498 DE RJF94 QSA 3 QRV K. RJF94 QTO 1500 QRD XMWH XUMB QRE 1830 QBD 16000 K (meaning 08498 Airborne at 1500 Bound for XMWH from XUMB Estimated Time of Arrival XMWH 1830. Fuel remaining 16000)

1511 26930 (AN-26 Yellow07): RJC38 RJF94 DE 26930 QTO 1500 QRD XLWF XUMO QBD 3500 QRE 1610 K - QQM XLWF 1615 SK

1515 RJF94 RJC38 DE 08498 QTO 1500 QRD XMWH XUMB QRE 1830 QBD 16000 K - QTH 5902 3250 QTR 1600 QBG 7300 K – QTH 5923 2230 QTR 1700 QBK 7300 K - QQL UMKK 1757 QBK 5100 QBD 8700 K - QQM XMWH 1810 SK

LOGS SECTION

The logs are sorted on code, date and time.

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
---	10-8	2140	Mon	4625	Music transmitted over the buzzer's signal by a pirate station	USB	(MUK)
---	11-8	----	Tue	4625	Pirate sending "Putin a dick" on top of S28	CW	(Sch)
---	16-8	1425	Sun	15799	Tentative V22	DQPSK 62.5 Bd	(AAI)
---	25-8	0820	Tue	6095	Tentative V22	DQPSK 250 Bd	(AAI)
---	25-8	1115	Tue	3515	CQ CQ CQ DE R4556 PSE K	CW	(JPL-Sib)
---	25-8	1339	Tue	9394	Tentative V22	BPSK 62.5	(AAI)
---	25-8	1340	Tue	19942	Tentative V22	BPSK 62.5	(AAI)
E06	6-8	0500	Thu	14525	210 897 105 75764 60181 58684 ... 01223 39632 78696 897 105 00000	USB	(HFD)
E06	6-8	0600	Thu	16115	210 897 105 75764 60181 58684 ... 01223 39632 78696 897 105 00000	USB	(AB/HFD)
E06	7-8	0600	Fri	16115	210 897 105 75764 60181 58684 ... 01223 39632 78696 897 105 00000	USB	(AB)
E06	20-8	0600	Thu	16115	210 897 105 75764 60181 58684 ... 01223 39632 78696 897 105 00000	USB	(AB)
E06	21-8	0500	Fri	13540	210 897 105 75764 60181 58684 ... 01223 39632 78696 897 105 00000	USB	(AB)
E06	21-8	0600	Fri	16115	210 897 105 75764 60181 58684 ... 01223 39632 78696 897 105 00000	USB	(AB)
E06	22-8	1200	Sat	14753	832 745 206 08897 84495 53164 ... 30861 39519 07916 745 206 00000	USB	(AB)
E06	23-8	1100	Sun	15610	832 745 206 08897 84495 53164 ... 30861 39519 07916 745 206 00000	USB	(AB)
E06	23-8	1200	Sun	14753	832 745 206 08897 84495 53164 ... 30861 39519 07916 745 206 00000	USB	(AB)
E07	1-8	0620	Sat	10264	024 024 024 000	USB	(AB)
E07	1-8	0620	Sat	9046	024 024 024 000	USB	(AB)
E07	2-8	1700	Sun	13881	818 1 348 108 66741 66618 89990 ... 47733 83843 26061 000 000	AM	(AB/MPJ/HFD)
E07	2-8	1720	Sun	12181	818 1 348 108 66741 66618 89990 ... 47733 83843 26061 000 000	AM	(AB/MPJ/HFD)
E07	2-8	1740	Sun	10881	818 1 348 108 66741 66618 89990 ... 47733 83843 26061 000 000	AM	(AB/MPJ/HFD)
E07	3-8	1900	Mon	14378	349 1 160 45 21759 12282 13604 ... 23150 37029 37412 000 000	AM	(AB/MPJ)
E07	3-8	1900	Mon	14378	349 349 349 000	AM	(HFD)
E07	3-8	1900	Mon	10958	349 349 349 000	AM	(HFD)
E07	3-8	1920	Mon	13458	349 1 160 45 21759 12282 13604 ... 23150 37029 37412 000 000	AM	(AB/HFD)
E07	3-8	1940	Mon	10958	349 1 160 45 21759 12282 13604 ... 23150 37029 37412 000 000	AM	(AB/MPJ)
E07	5-8	0600	Wed	9064	024 1 712 57 05453 37620 48558 ... 64196 00276 55603 000 000	USB	(AB)
E07	5-8	0620	Wed	10264	024 1 712 57 05453 37620 48558 ... 64196 00276 55603 000 000	USB	(AB)
E07	5-8	0640	Wed	11464	024 1 712 57 05453 37620 48558 ... 64196 00276 55603 000 000	USB	(AB)
E07	5-8	1700	Wed	13881	818 818 818 000	AM	(AB/MPJ)
E07	5-8	1720	Wed	12181	818 818 818 000	AM	(AB/MPJ)
E07	5-8	1900	Wed	14378	349 1 160 45 21759 12282 13604 68600 28641 ... 11891 39864 23150 37029 37412 000 000	AM	(MPJ)
E07	5-8	1920	Wed	13458	349 1 160 45 21759 12282 13604 68600 28641 ... 11891 39864 23150 37029 37412 000 000	AM	(MPJ)
E07	5-8	1940	Wed	10958	349 1 160 45 21759 12282 13604 68600 28641 ... 11891 39864 23150 37029 37412 000 000	AM	(MPJ)
E07	6-8	2010	Thu	10753	716 716 716 000	AM	(AB/HFD)
E07	6-8	2030	Thu	9147	716 716 716 000	AM	(AB/HFD)
E07	8-8	0600	Sat	9064	024 1 712 57 05453 37620 48558 ... 64196 00276 55603 000 000	USB	(AB)
E07	8-8	0620	Sat	10264	024 1 712 57 05453 37620 48558 ... 64196 00276 55603 000 000	USB	(AB)
E07	8-8	0640	Sat	11464	024 1 712 57 05453 37620 48558 ... 64196 00276 55603 000 000	USB	(AB)
E07	9-8	1700	Sun	13881	818 818 818 000	AM	(AB/MPJ)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
E07	9-8	1720	Sun	12181	818 818 818 000	AM	(AB/MPJ)
E07	10-8	1900	Mon	14378	349 349 349 000	AM	(AB/MPJ)
E07	10-8	1920	Mon	13458	349 349 349 000	AM	(AB)
E07	12-8	0600	Wed	9064	024 024 024 000	USB	(AB)
E07	12-8	0620	Wed	10264	024 024 024 000	USB	(AB)
E07	12-8	1700	Wed	13881	818 818 818 000	AM	(AB)
E07	12-8	1720	Wed	12181	818 818 818 000	AM	(AB)
E07	12-8	1900	Wed	14378	349 349 349 000	AM	(AB)
E07	12-8	1920	Wed	13458	349 349 349 000	AM	(AB)
E07	13-8	2010	Thu	10753	716 716 716 000	AM	(AB)
E07	15-8	0600	Sat	9064	024 024 024 000	USB	(AB)
E07	15-8	0620	Sat	10264	024 024 024 000	USB	(AB)
E07	16-8	1720	Sun	12181	818 818 818 000	AM	(MPJ)
E07	17-8	1900	Mon	14378	349 349 349 000	AM	(MPJ)
E07	17-8	1920	Mon	13348	349 349 349 000	AM	(MPJ)
E07	19-8	0600	Wed	9064	024 1 686 80 07945 06769 41616 ..., 27001 64039 26945 000 000	USB	(AB)
E07	19-8	0620	Wed	10264	024 1 686 80 07945 06769 41616 ..., 27001 64039 26945 000 000	USB	(AB)
E07	19-8	0640	Wed	11464	024 1 686 80 07945 06769 41616 ..., 27001 64039 26945 000 000	USB	(AB)
E07	19-8	1700	Wed	13881	818 818 818 000	AM	(AB/MPJ)
E07	19-8	1720	Wed	12181	818 818 818 000	AM	(AB)
E07	19-8	1900	Wed	14378	349 349 349 000	AM	(AB/MPJ)
E07	19-8	1920	Wed	13458	349 349 349 000	AM	(AB/MPJ)
E07	20-8	2010	Thu	10753	716 716 716 000	AM	(AB)
E07	20-8	2030	Thu	9147	716 716 716 000	AM	(AB)
E07	22-8	0600	Sat	9064	024 1 686 80 07945 06769 41616 ..., 27001 64039 26945 000 000	USB	(AB)
E07	22-8	0620	Sat	10264	024 1 686 80 07945 06769 41616 ..., 27001 64039 26945 000 000	USB	(AB)
E07	22-8	0640	Sat	11464	024 1 686 80 07945 06769 41616 ..., 27001 64039 26945 000 000	USB	(AB)
E07	24-8	1900	Mon	14378	349 1 826 36 73972 05464 88375 ... 59971 82383 25779 000 000	AM	(AB)
E07	24-8	1920	Mon	13458	349 1 826 36 73972 05464 88375 ... 59971 82383 25779 000 000	AM	(AB/MPJ)
E07	24-8	1940	Mon	10958	349 1 826 36 73972 05464 88375 ... 59971 82383 25779 000 000	AM	(AB/MPJ)
E07	26-8	1702	Wed	12181	818 818 818 000	AM	(MPJ)
E07	26-8	1720	Wed	13881	818 818 818 000	AM	(MPJ)
E07	26-8	1900	Wed	14378	349 1 826 36 73972 05474 88375 47097 65578 ... 16066 97657 59971 82383 25779 000 000	AM	(MPJ)
E07	26-8	1920	Wed	13458	349 1 826 36 73972 05474 88375 47097 65578 ... 16066 97657 59971 82383 25779 000 000	AM	(MPJ)
E07	26-8	1940	Wed	10958	349 1 826 36 73972 05474 88375 47097 65578 ... 16066 97657 59971 82383 25779 000 000	AM	(MPJ)
E07	27-8	2010	Thu	10753	716 716 716 000	AM	(AB)
E07	27-8	2030	Thu	9147	716 716 716 000	AM	(AB)
E07	30-8	1700	Sun	13881	818 818 818 000	AM	(AB/MPJ)
E07	30-8	1720	Sun	12181	818 818 818 000	AM	(AB/MPJ)
E07	31-8	1900	Mon	14378	349 1 826 36 73972 05464 88375 ... 59971 82383 25779 000 000	AM	(AB)
E07	31-8	1920	Mon	13458	349 1 826 36 73972 05464 88375 ... 59971 82383 25779 000 000	AM	(AB)
E07	31-8	1940	Mon	10958	349 1 826 36 73972 05464 88375 ... 59971 82383 25779 000 000	AM	(AB)
E07a	5-8	2000	Wed	12166	172 172 172 000	USB	(AB/HFD)
E07a	5-8	2020	Wed	10766	172 172 172 000	USB	(AB/HFD)
E07a	7-8	1510	Fri	12233	241 214 241 000	USB	(AB)
E07a	7-8	1510	Fri	12213	241 2241 241 000	USB	(HFD)
E07a	7-8	1530	Fri	11413	241 214 241 000	USB	(AB/HFD)
E07a	8-8	0800	Sat	12177	148 148 148 000	USB	(HFD)
E07a	8-8	0820	Sat	13477	148 148 148 000	USB	(AB/HFD)
E07a	12-8	2000	Wed	12166	172 172 172 000	USB	(AB)
E07a	12-8	2020	Wed	10766	172 172 172 000	USB	(AB)
E07a	13-8	0430	Thu	7933	912 912 912 000	USB	(AB)
E07a	13-8	0450	Thu	9133	912 912 912 000	USB	(AB)
E07a	14-8	1510	Fri	12213	241 241 241 000	USB	(AB/GHn)
E07a	14-8	1530	Fri	11413	241 241 241 000	USB	(AB)
E07a	15-8	0820	Sat	13477	148 148 148 000	USB	(AB)
E07a	19-8	2000	Wed	12166	172 1 16966 9592 68 72821 86705 37860 ... 25012 91413 16081 000 000	USB	(AB/MPJ)
E07a	19-8	2020	Wed	10766	172 1 16966 9592 68 72821 86705 37860 ... 25012 91413 16081 000 000	USB	(AB)
E07a	19-8	2040	Wed	9266	172 1 16966 9592 68 72821 86705 37860 ... 25012 91413 16081 000 000	USB	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
E07a	20-8	0430	Thu	7933	912 1 16966 9592 68 72821 86705 37860 ... 25012 91413 16081 000 000	USB	(AB)
E07a	20-8	0450	Thu	9133	912 1 16966 9592 68 72821 86705 37860 ... 25012 91413 16081 000 000	USB	(AB)
E07a	20-8	0510	Thu	10233	912 1 16966 9592 68 72821 86705 37860 ... 25012 91413 16081 000 000	USB	(AB)
E07a	21-8	1510	Fri	12213	241 1 62320 722 77 92622 35880 97326 ... 47077 36033 53926 000 000	USB	(AB/MPJ)
E07a	21-8	1530	Fri	11413	241 1 62320 722 77 92622 35880 97326 ... 47077 36033 53926 000 000	USB	(AB/MPJ)
E07a	21-8	1550	Fri	10113	241 1 62320 722 77 92622 35880 97326 ... 47077 36033 53926 000 000	USB	(AB/MPJ)
E07a	22-8	0800	Sat	12177	148 1 62320 722 77 92622 35880 97326 ... 47077 36033 53926 000 000	USB	(AB)
E07a	22-8	0820	Sat	13477	148 1 62320 722 77 92622 35880 97326 ... 47077 36033 53926 000 000	USB	(AB)
E07a	22-8	0840	Sat	14877	148 1 62320 722 77 92622 35880 97326 ... 47077 36033 53926 000 000	USB	(AB)
E07a	26-8	2000	Wed	12166	172 1 39299 7441 77 72395 82788 34250 ... 74563 97259 33102 000 000	USB	(AB/MPJ)
E07a	26-8	2020	Wed	10766	172 1 39299 7441 77 72395 82788 34250 ... 74563 97259 33102 000 000	USB	(AB)
E07a	26-8	2040	Wed	9266	172 1 39299 7441 77 72395 82788 34250 ... 74563 97259 33102 000 000	USB	(AB)
E11	1-8	0710	Sat	15905	491/00	USB	(AB)
E11	1-8	1705	Sat	14854	392/00	USB	(AB)
E11	2-8	0730	Sun	17120	352/00	USB	(AB)
E11	2-8	0805	Sun	14975	311/00	USB	(AB)
E11	2-8	2005	Sun	9130	366/30 Attention ...	USB	(AB)
E11	3-8	0600	Mon	13908	181/00	USB	(AB)
E11	3-8	0745	Mon	9610	262/00	USB	(AB)
E11	3-8	0830	Mon	12924	649/00	USB	(AB)
E11	4-8	0645	Tue	13424	517/00	USB	(AB)
E11	4-8	0745	Tue	15632	335/00	USB	(AB)
E11	4-8	1045	Tue	13873	576/00	USB	(AB/MPJ)
E11	4-8	1045	Tue	10302	469/00	USB	(AB/MPJ)
E11	4-8	1300	Tue	15803	133/00	USB	(AB/MPJ)
E11	4-8	1400	Tue	13722	985/10 Attention 09392 56038 57903 54055 36996 81051 22370 67780 36739 31326 Attention, rpt msg, out	USB	(AB/MPJ)
E11	4-8	1925	Tue	11581	551/00	USB	(AB/MPJ)
E11	5-8	1300	Wed	15803	133/00	USB	(AB)
E11	5-8	1705	Wed	14865	392/00	USB	(AB/MPJ)
E11	6-8	0645	Thu	13424	517/00	USB	(AB)
E11	6-8	0745	Thu	15632	335/00	USB	(AB)
E11	6-8	0820	Thu	9150	430/30 Attention 00206 86752 18870 ... 48953 47728 31398 Attention, rpt msg, out	USB	(AB)
E11	6-8	1530	Thu	10356	262/00	USB	(MPJ)
E11	7-8	0600	Fri	13908	181/00	USB	(AB)
E11	7-8	0730	Fri	17120	352/00	USB	(AB)
E11	7-8	0830	Fri	12924	649/00	USB	(AB)
E11	7-8	1225	Fri	13537	521/00	USB	(AB)
E11	7-8	2000	Fri	8530	576/00	USB	(MPJ)
E11	8-8	1705	Sat	14865	392/00	USB	(AB)
E11	9-8	0730	Sun	17120	352/00	USB	(AB)
E11	9-8	0745	Sun	9610	262/32 Attention 76694 88667 51238 ... 23982 87080 48088 Attention, rpt msg, out	USB	(AB)
E11	9-8	1625	Sun	15795	972/00	USB	(AB)
E11	9-8	1625	Sun	15795	972/00	USB	(AB)
E11	9-8	2005	Sun	9130	363/00	USB	(PPA)
E11	10-8	0600	Mon	13908	181/00	USB	(AB)
E11	10-8	0900	Mon	13427	534/00	USB	(AB)
E11	10-8	1230	Mon	13537	521/00	USB	(AB/HFD)
E11	11-8	0645	Tue	13424	517/00	USB	(AB)
E11	11-8	0710	Tue	14753	633/00	USB	(AB)
E11	11-8	0745	Tue	15632	335/00	USB	(AB)
E11	11-8	1045	Tue	10302	469/00	USB	(AB)
E11	11-8	1300	Tue	15803	133/00	USB	(AB)
E11	12-8	0545	Wed	13424	348/00	USB	(AB)
E11	12-8	0900	Wed	13427	534/00	USB	(AB)
E11	12-8	1300	Wed	15803	133/00	USB	(AB)
E11	12-8	1625	Wed	15795	972/00	USB	(AB)
E11	13-8	0645	Thu	13424	517/00	USB	(AB)
E11	13-8	0710	Thu	15905	491/00	USB	(AB)
E11	13-8	0745	Thu	15632	335/00	USB	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
E11	13-8	0820	Thu	9150	438/00	USB	(AB)
E11	13-8	1730	Thu	8088	416/00	USB	(AB)
E11	14-8	0545	Fri	13424	348/00	USB	(AB)
E11	14-8	0600	Fri	13908	181/00	USB	(AB)
E11	14-8	0830	Fri	12924	649/00	USB	(AB)
E11	14-8	1225	Fri	13537	521/00	USB	(AB)
E11	14-8	1710	Fri	10487	959/28 Attention 91767 73908 59071 ... 24550 43636 41745 attention, rpt msg, out	USB	(AB)
E11	14-8	2000	Fri	8530	577/33 Attention 71111 20604 99421 ... 42656 20646 97833 Attention, rpt msg, out	USB	(AB)
E11	16-8	1540	Sun	16335	228/00	USB	(MPJ)
E11	16-8	1625	Sun	15795	972/00	USB	(MPJ)
E11	17-8	0820	Mon	9150	438/00	USB	(AB)
E11	17-8	0900	Mon	13427	534/00	USB	(AB)
E11	17-8	1225	Mon	13537	521/00	USB	(AB)
E11	18-8	1045	Tue	13837	576/00	USB	(AB)
E11	18-8	1820	Tue	14518	980/10 55268 04565 24134 ... (into local QRM) ... 88919 6626_ 95191 ...	USB	(MPJ)
E11	19-8	0930	Wed	10213	270/00	USB	(AB)
E11	19-8	1625	Wed	15795	972/00	USB	(AB/MPJ)
E11	19-8	1705	Wed	14865	392/00	USB	(AB)
E11	20-8	0745	Thu	15632	335/00	USB	(AB)
E11	20-8	1530	Thu	10356	262/00	USB	(MPJ)
E11	20-8	1730	Thu	8088	416/00	USB	(AB/MPJ)
E11	20-8	1925	Thu	11581	551/00	USB	(AB/MPJ)
E11	21-8	0545	Fri	13424	348/00	USB	(AB)
E11	21-8	0710	Fri	14753	633/00	USB	(AB)
E11	21-8	0730	Fri	17120	352/00	USB	(AB)
E11	21-8	1225	Fri	13537	521/00	USB	(MPJ)
E11	21-8	2000	Fri	8530	576/00	USB	(MPJ)
E11	24-8	0745	Mon	9610	262/00	USB	(AB)
E11	24-8	0900	Mon	13427	534/00	USB	(AB)
E11	24-8	1540	Mon	16335	228/00	USB	(MPJ)
E11	27-8	1530	Thu	10356	262/00	USB	(MPJ)
E11	28-8	0550	Fri	13424	348/00	USB	(AB)
E11	28-8	0600	Fri	13908	181/00	USB	(AB)
E11	28-8	0710	Fri	14753	633/00	USB	(AB)
E11	28-8	0830	Fri	12924	649/00	USB	(AB)
E11	29-8	1705	Sat	14865	392/00	USB	(MPJ)
E11a	1-8	1400	Sat	13722	986/10 Attention 54450 27547 17195 72439 59466 34091 89940 59970 93066 32022 Attention, rpt msg, out	USB	(MPJ)
E11a	3-8	0820	Mon	9150	430/30 Attention 00206 86752 18870 ... 48953 47728 31398 Attention, rpt msg, out	USB	(AB)
E11a	3-8	0900	Mon	13427	534/35 Attention 55959 81584 47886 ... 65732 60750 15470 Attention, rpt msg, out	USB	(AB)
E11a	3-8	1110	Mon	16388	950/32 Attention	USB	(AB)
E11a	3-8	1540	Mon	16335	224/38 Attention 99250 ...	USB	(MPJ)
E11a	3-8	1710	Mon	10487	957/26 Attention 83829 63988 54429 ... 89752 79340 97255 Attention, rpt msg, out	USB	(AB/MPJ)
E11a	4-8	0530	Tue	14769	982/10 Attention 60628 97628 11494 85476 25787 35075 99839 09377 74792 59202 Attention, rpt msg, out	USB	(AB)
E11a	4-8	0710	Tue	14753	637/34 Attention 14496 26705 85211 ... 27098 04736 36422 Attention, rpt msg, out	USB	(AB)
E11a	4-8	1810	Tue	14517	98_/10 unreadable	USB	(MPJ)
E11a	5-8	0545	Wed	13424	349/31 Attention 54749 04730 33703 ... 17688 49051 25984 Attention, rpt msg, out	USB	(AB)
E11a	5-8	0900	Wed	13427	534/35 Attention 55959 81584 47886 ... 65732 60750 15470 Attention, rpt msg, out	USB	(AB)
E11a	6-8	0820	Thu	9150	430/30 Attention 00206 86752 18870 ... 48953 47728 31398 Attention, rpt msg, out	USB	(AB)
E11a	7-8	0545	Fri	13424	349/31 Attention 54749 04730 33703 ... 17686 49051 25984 Attention, rpt msg, out	USB	(AB)
E11a	7-8	0710	Fri	14753	637/34 Attention 14496 26705 85211 ... 27098 04736 36422 Attention, rpt msg, out	USB	(AB)
E11a	7-8	1710	Fri	10487	959/23 Attention 60627 09991 59482 ... 29249 51559 78134 Attention,	USB	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
					rpt msg, out		
E11a	8-8	0530	Sat	14769	982/10 Attention 42050 27284 93420 69918 95306 13419 72105 11559 85786 29940 Attention, rpt msg, out	USB	(AB)
E11a	8-8	1810	Sat	14518	984/10 Attention 05065 18993 40748 07541 97878 84437 11172 03506 53686 09392 Attention, rpt msg, out	USB	(AB)
E11a	9-8	1540	Sun	16335	224/38 Attention 99250 35916 (35918 ?) 28148 15834 00193 ... 65986 40371 45972 94939 17417	USB	(AB)
E11a	11-8	1045	Tue	13873	577/33 Attention 71111 20604 99421 ... 42656 20646 97833 Attention, rpt msg, out	USB	(AB)
E11a	11-8	1400	Tue	13722	988/10 Attention 62418 04354 70385 35403 07656 77080 96203 00149 43441 80147 Attention, rpt msg, out	USB	(AB)
E11a	11-8	1810	Tue	14518	986/10 Attention 70017 33181 01180 87606 14236 97929 11964 82041 07924 73076 Attention, rpt msg, out	USB	(MPJ)
E11a	11-8	1925	Tue	11581	552/38 Attention 71493 37824 77204 ,, 83191 39145 29555 Attention, rpt msg, out	USB	(AB/MPJ)
E11a	12-8	0930	Wed	10213	278/31 Attention ...	USB	(AB)
E11a	12-8	1705	Wed	14965	392/37 Attention 09077 53350 82102 ... 17569 58085 14282 Attention, rpt mg, out	USB	(AB)
E11a	13-8	0930	Thu	10213	278/31 Attention 50539 19005 63796 ... 63043 62911 90357 Attention, rpt msg, out	USB	(AB)
E11a	14-8	1110	Fri	16388	958/34 Attention 12122 79965 42322 ... 39618 06335 46197 Attention, rpt msg, out	USB	(AB)
E11a	15-8	1400	Sat	13722	981/10 Attention 33949 81483 62042 50725 94485 19839 43356 96124 02883 57403 Attention, rpt msg, out	USB	(AB/GHn)
E11a	17-8	0600	Mon	13908	185/32 Attention ...	USB	(AB)
E11a	17-8	0745	Mon	9610	262/00	USB	(AB)
E11a	17-8	0830	Mon	12924	646/37 Attention 91150 73428 97019 ... 77087 96523 05898 Attention, rpt msg, out	USB	(AB)
E11a	17-8	1015	Mon	16530	476/37 Vnimanie 83775 82400 84010 ... 65633 18391 65280 Vnimanie, rpt msg, out	USB	(AB)
E11a	18-8	1045	Tue	10302	460/35 Attention 92146 56345 21451 ... 11226 06258 98302 Attention, rpt msg, out	USB	(AB)
E11a	18-8	1400	Tue	13722	988/10 Attention 68687 91406 83052 92377 62604 08790 56365 90314 62394 31214 Attention, rpt msg, out	USB	(AB)
E11a	19-8	1300	Wed	15803	131/30 Attention 61414 38679 62040 ... 62496 51435 67268 Attention, rpt msg, out	USB	(AB-FNL)
E11a	21-8	0830	Fri	12924	646/37 Attention 91150 73428 97019 ... 77087 96523 05898 Attention, rpt msg, out	USB	(AB)
E11a	21-8	1110	Fri	16388	952/31 Attention 10135 78471 94621 73477 93464 ... 35276 42917 88474 86288 15838	USB	(MPJ)
E11a	21-8	1710	Fri	10587	953/20 Attention 32979 93479 88128 ... 66885 79225 52911 Attention, rpt msg, out	USB	(AB)
E11a	22-8	1400	Sat	13722	982/10 Attention 99023 19594 11118 85157 65157 89072 75388 94896 72327 24088 Attention, rpt msg, out	USB	(MPJ)
E11a	22-8	1810	Sat	14518	983/10 Attention 77960 03335 08867 67425 13282 92478 98007 43275 66423 57006 Attention, rpt msg, out	USB	(AB/MPJ)
E11a	24-8	0600	Mon	13908	181/00	USB	(AB)
E11a	24-8	1110	Mon	16388	953/33 Attention ...	USB	(AB)
E11a	24-8	1710	Mon	10487	959/25 Attention 03201 60513 15148 01023 21610 ...	USB	(MPJ)
E11a	24-8	1724	Mon	13537	520/30 Attention 85573 89059 12712 21141 72235 ... 94377 09489 99889 33095 55281	USB	(MPJ)
E11a	25-8	0645	Tue	13424	518/30 Attention 51154 02665 14706 ... 02731 49952 28500 Attention, rpt msg, out	USB	(AB)
E11a	25-8	1810	Tue	14518	983/10 Attention 50492 81764 80884 11672 22179 32525 69830 63092 90255 03309 Attention, rpt msg, out	USB	(MPJ)
E11a	27-8	1730	Thu	8088	415/37 Attention 46918 90282 61278 54264 35046 ... 50447 83169 72852 40717 32255	USB	(MPJ)
E11a	29-8	1400	Sat	13722	988/10 Attention __905 66456 36374 73270 63222 47328 59094 57273 90840 45791	USB	(MPJ)
E17z	6-8	0800	Thu	16780	674 918 5 35444 81434 39706 31728 46049 918 5 00000	USB	(AB)
E17z	6-8	0810	Thu	12850	674 918 5 35444 81434 39706 31728 46049 918 5 00000	USB	(AB)
E17z	13-8	0800	Thu	16780	674 918 5 35444 81434 39706 31728 46049 918 5 00000	USB	(AB)
E17z	13-8	0810	Thu	12850	674 918 5 35444 81434 39706 31728 46049 918 5 00000	USB	(AB)
EGY	27-8	1850	Thu	19667.7	MFA Cairo msg to Egyptian embassy Ouagadougou	SITOR-A 100/170	(DK8OK)
EGY	31-8	2231	Mon	11408	55501 Egyptian Embassy, Havana crypto msg to 99910 MFA Cairo	Codan 9001/3012 16	(MCO)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
						tone	
EGY	31-8	2232	Mon	10820	55501 Egyptian Embassy, Havana crypto msg to 99910 MFA Cairo	Codan 9001/3012 16 tone	(MCO)
EGY	31-8	2232	Mon	12230	55501 Egyptian Embassy, Havana crypto msg to 99910 MFA Cairo	Codan 9001/3012 16 tone	(MCO)
EGY	31-8	2241	Mon	11033	55501 Egyptian Embassy, Havana crypto msg to 99910 MFA Cairo	Codan 9001/3012 16 tone	(MCO)
EGY	31-8	2241	Mon	13522	55501 Egyptian Embassy, Havana crypto msg to 99910 MFA Cairo	Codan 9001/3012 16 tone	(MCO)
G06	3-8	0800	Mon	7320	329 329 329 00000	USB	(AB)
G06	3-8	1700	Mon	5246	248 248 248 00000	USB	(AB/MPJ)
G06	3-8	1800	Mon	4892	248 248 248 00000	USB	(AB)
G06	5-8	1200	Wed	6933	248 248 248 00000	USB	(AB/HFD)
G06	5-8	1300	Wed	7411	248 248 248 00000	USB	(AB)
G06	10-8	1700	Mon	5246	248 248 248 00000	USB	(AB)
G06	10-8	1800	Mon	4892	248 248 248 00000	USB	(AB)
G06	12-8	1200	Wed	6933	248 248 248 00000	USB	(AB)
G06	12-8	1300	Wed	7411	248 248 248 0000	USB	(AB)
G06	13-8	1830	Thu	6887	842 317 20 37839 35787 98273 60187 16202 95625 31691 52538 61025 22567 93296 67423 40968 16891 63781 34820 04842 60491 75924 04594 317 20 00000	USB	(AB/MPJ)
G06	14-8	1930	Fri	5943	218 394 20 06132 75514 79681 ... 49870 63962 04884 394 20 00000	USB	(AB)
G06	17-8	0800	Mon	7320	329 329 329 00000	USB	(AB)
G06	27-8	1830	Thu	6887	842 317 20 37839 35787 98273 ... 60491 75924 04594 317 20 00000	USB	(AB/MPJ)
G06	28-8	1930	Fri	5943	218 394 20 06132 75514 79681 ... 49870 63962 04884 394 20 00000	USB	(MPJ)
HM01	1-8	1627	Sat	11435	67302 38233 83844 83653 37137 35248	AM/RDFT	(DSch)
HM01	1-8	2230	Sat	17480	67302 38233 83844 83653 37137 35248	AM/RDFT	(Dan)
HM01	2-8	1728	Sun	11530	67303 38234 83845 83654 53651 14361	AM/RDFT	(DSch)
HM01	3-8	0500	Mon	5855	67303 38234 83845 83654 53651 14361	AM/RDFT	(AB)
HM01	3-8	0557	Mon	10345	67303 38234 83845 83654 53651 14361	AM/RDFT	(AB)
HM01	3-8	0657	Mon	9330	67303 38234 83845 83654 53651 14361	AM/RDFT	(AB)
HM01	3-8	0757	Mon	9065	67303 38234 83845 83654 53651 14361	AM/RDFT	(AB)
HM01	3-8	1558	Mon	11435	67304 38235 83846 83655 53651 14361	AM/RDFT	(DSch)
HM01	3-8	2230	Mon	10715	67304 38235 83846 83655 53651 14361	AM/RDFT	(Dan)
HM01	4-8	0757	Tue	11635	67304 38235 83846 83655 53651 14361	AM/RDFT	(AB)
HM01	4-8	1702	Tue	11530	67305 38236 83847 83656 53652 14362	AM/RDFT	(DSch)
HM01	4-8	2230	Tue	17480	67305 38236 83847 83656 53652 14362	AM/RDFT	(Dan)
HM01	5-8	0559	Wed	10345	67305 38236 83847 83656 53652 14362	AM/RDFT	(AB)
HM01	5-8	0659	Wed	9330	67305 38236 83847 83656 53652 14362	AM/RDFT	(AB)
HM01	5-8	1557	Wed	11435	67306 38237 83848 83657 53653 14363	AM/RDFT	(DSch)
HM01	6-8	0600	Thu	14375	67306 38237 83848 83657 53653 14363	AM/RDFT	(HFD)
HM01	6-8	1553	Thu	11435	Started with first 4 groups of 5 Aug, then stopped. Resumed with 67307 38238 83849 83658 53654 14364 at 1556 UTC	AM/RDFT	(DSch)
HM01	7-8	0500	Fri	5855	67307 38238 83849 83658 53654 14364	AM/RDFT	(AB)
HM01	7-8	0559	Fri	10345	67307 38238 83849 83658 53654 14364	AM/RDFT	(AB)
HM01	7-8	0657	Fri	9065	67307 38238 83849 83658 53654 14364	AM/RDFT	(AB)
HM01	7-8	0659	Fri	9330	67307 38238 83849 83658 53654 14364	AM/RDFT	(AB)
HM01	7-8	1559	Fri	11435	67308 05721 45501 62021 53655 14365	AM/RDFT	(DSch)
HM01	8-8	0800	Sat	11635	67308 05721 45501 62021 53655 14365	AM/RDFT	(HFD)
HM01	8-8	1559	Sat	11435	67309 05721 45501 62021 53656 14366	AM/RDFT	(DSch)
HM01	9-8	0557	Sun	10345	67309 05721 45501 62021 53656 14366	AM/RDFT	(AB)
HM01	9-8	1733	Sun	11530	42801 05722 45502 62022 53657 14367	AM/RDFT	(DSch)
HM01	10-8	0559	Mon	10345	42801 05722 45502 62022 53657 14367	AM/RDFT	(AB)
HM01	10-8	1627	Mon	11435	42801 05723 45503 62023 53658 26371	AM/RDFT	(DSch)
HM01	11-8	1638	Tue	11435	42802 05724 45504 62024 53659 26371	AM/RDFT	(DSch)
HM01	12-8	0501	Wed	5855	42802 05724 45504 62024 53659 26371 (late start)	AM/RDFT	(AB)
HM01	12-8	0557	Wed	10345	42802 05724 45504 62024 53659 26371	AM/RDFT	(AB)
HM01	12-8	0757	Wed	9065	42802 05724 45504 62024 53659 26371	AM/RDFT	(AB)
HM01	12-8	1604	Wed	11435	42802 05s725 45505 62025 56411 26372	AM/RDFT	(DSch)
HM01	13-8	0500	Thu	11462	42803 05725 45505 62025 56411 26372	AM/RDFT	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
HM01	13-8	0600	Thu	11462	42803 05725 45505 62025 56411 26372. Should be on 14375 kHz. Stops at 0613 UTC	AM/RDFT	(AB)
HM01	13-8	0613	Thu	14375	Switch from 11462 kHz. "5641" then stops. Restart at 0616 UTC: 42803 05725 45505 62025 56411 26372	AM/RDFT	(AB)
HM01	13-8	2230	Thu	17480	42804 05726 45506 62026 56411 26373	AM/RDFT	(Dan)
HM01	14-8	0557	Fri	10345	42804 05726 45506 62026 56411 26373	AM/RDFT	(AB)
HM01	15-8	1600	Sat	11435	42806 05728 45508 62028 56413 26375	AM/RDFT	(DSch)
HM01	17-8	1557	Mon	11435	Repeating yesterdays groups. Stops and restarts with 42808 80501 23847 03871 56415 26377 at 1600 UTC	AM/RDFT	(DSch)
HM01	18-8	1601	Tue	11435	Radio Havana broadcast. Should be HM01. Off at 1604 UTC and into HM01 groups at 1607 UTC: 13071 80501 23842 03871 56416 26378	AM/RDFT	(DSch)
HM01	19-8	1603	Wed	11435	13071 80502 23843 03872 56417 26379	AM/RDFT	(DSch)
HM01	20-8	1554	Thu	11435	Sending yesterdays groups. Stops and sends 13072 80503 23844 03873 56418 21581 at 1600 UTC	AM/RDFT	(DSch)
HM01	21-8	0557	Fri	10345	13071 80503 23844 03873 56418 21581	AM/RDFT	(AB)
HM01	21-8	1559	Fri	11435	13073 80504 23845 03874 56419 21581	AM/RDFT	(DSch)
HM01	22-8	1559	Sat	11435	13074 80505 23846 03874 56419 21581	AM/RDFT	(DSch)
HM01	23-8	0559	Sun	10345	13074 80505 23846 03875 62641 21582	AM/RDFT	(AB)
HM01	23-8	0659	Sun	9330	13074 80505 23846 03875 62641 21582	AM/RDFT	(AB)
HM01	23-8	0759	Sun	9330	13074 80505 23846 03875 62641 21582. Should be on 9065 kHz. Moved to 9065 kHz at 0810 UTC	AM/RDFT	(AB)
HM01	23-8	0810	Sun	9065	13074 80505 23846 03875 62641 21582. Switched from 9330 kHz	AM/RDFT	(AB)
HM01	23-8	0859	Sun	9240	13074 80505 23846 03875 62641 21582	AM/RDFT	(AB)
HM01	23-8	0959	Sun	9155	13074 80505 23846 03875 62641 21582	AM/RDFT	(AB)
HM01	23-8	1554	Sun	11435	Sending previous day groups then at 1559z into new groups 13075 80506 23847 03876 62641 21583	AM/RDFT	(DSch)
HM01	24-8	1601	Mon	11435	13076 80507 87801 03877 62642 21584	AM/RDFT	(DSch)
HM01	25-8	0629	Tue	14375	13076 80507 87801 03877 62642 21584	AM/RDFT	(AB)
HM01	25-8	1549	Tue	11435	Brief Radio Havana then previous day groups followed by 13077 80508 87802 03878 62643 21585	CW	(DSch)
HM01	26-8	1630	Wed	11435	13078 80509 87802 03879 62644 21586	AM/RDFT	(DSch)
HM01	27-8	1630	Thu	11435	13079 68481 87803 48381 62645 21586	AM/RDFT	(DSch)
HM01	28-8	0500	Fri	5855	13079 68481 87803 48381 62645 21587	AM/RDFT	(AB)
HM01	28-8	0557	Fri	10345	13079 68481 87803 48381 62645 21587	AM/RDFT	(AB)
HM01	28-8	1554	Fri	11435	14051 68482 87804 48381 62646 86771	AM/RDFT	(DSch)
HM01	29-8	1603	Sat	11435	14051 68483 87805 48382 62647 86771	AM/RDFT	(DSch)
HM01	30-8	1614	Sun	11435	14052 68484 87806 48383 62748 86772	AM/RDFT	(DSch)
HM01	31-8	0500	Mon	5855	14052 68484 87806 48383 62649 86772	AM/RDFT	(AB)
HM01	31-8	1559	Mon	11435	14053 68485 87807 48384 78521 86773	AM/RDFT	(DSch)
HM01	31-8	2200	Mon	10715	14053 68485 87807 48384 78521 86773	AM/RDFT	(Dan)
M01	1-8	1500	Sat	6435	025 217 30 = = 42965 12_66 64908 ... 37206 (37026) 77085 15473 16931 07236 52990 = (once) 217 217 30 (long zero) 30 (short zero) eventually 0 0 0. Single BTs at random in text.	CW	(MPJ)
M01	4-8	1800	Tue	5280	025 223 30 3 = = 18460 06420 12611 26295 82624 ... 73519 84016 05527 62996 42533 = = 223 30 000	CW	(MPJ-NL)
M01	6-8	1800	Thu	5280	025 706 30 = = 97039 _5037 48033 _5107 36956 ... 50391 21905 23019 96563 36670 = = 706 30 000	CW	(MPJ-NL)
M01	6-8	1820	Thu	9264	124 1 5082 140 88163 87880 03919 96051 88804 ... 49730 86009 54969 38573 15126 000 000	CW	(MPJ)
M01	6-8	1840	Thu	8116	124 1 5082 140 88163 87880 03919 96051 88804 ... 49730 86009 54969 38573 15126 000 000	CW	(MPJ)
M01	6-8	2000	Thu	4905	025 803 30 = = 69850 19014 11050 99283 51548 ... 28891 31780 68470 76602 01416 = = 803 30 000	CW	(AB/MPJ)
M01	11-8	1800	Tue	5280	025 297 30 = = 01874 32932 15996 02947 55869 ... 86618 01203 67813 40587 ... 297 30 000	CW	(MPJ-NL)
M01	11-8	2000	Tue	4905	025 564 30 = = 68055 62140 03109 96255 52940 ... 73466 47790 91779 01749 65035 = = 564 30 000	CW	(MPJ)
M01	13-8	2000	Thu	4905	025 217 30 = = VA 10993 07896 94166 34515 39823 ... 35010 09315 33893 09315 33893 (as sent) 217 217 30 30 (no BTs, no 000). VA inserts in text	CW	(MPJ)
M01	18-8	1800	Tue	5280	025 117 30 = = 86391 39517 25606 69955 05165 ... (QRN) 075__ 96519 71193 = = 117 30 000	CW	(MPJ)
M01	18-8	2000	Tue	4905	025 977 30 = = 22752 49604 96323 96002 92780 ... 75217 23082 45229 35903 65071 = = 977 30 000	CW	(MPJ)
M01	20-8	2000	Thu	4905	025 911 30 = = 34998 60409 36471 84354 06425 ... 86064 65716 16278 32655 82413 = = 911 30 000	CW	(MPJ)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M01	22-8	1500	Sat	6435	025 340 = = 46735 49755 66437 33194 55229 ... 90994 02705 10534 17036 134490 82903 87586 43651 = = 340 340 30 30 000	CW	(MPJ)
M01	27-8	2000	Thu	4905	025 551 30 = = 02813 25471 32740 61463 87902 ... 81732 73582 71111 37516 54699 05048 45002 = = 551 30 000	CW	(MPJ)
M01b	3-8	1810	Mon	5735	364 527 30 = = 82229 07041 (stops/restarts) 364 527 30 = = 82229 07041 09746 87574 84579 ... 43774 39461 40926 52814 98898 = = 527 30 //5125 kHz	MCW	(MPJ)
M01b	3-8	1810	Mon	5125	364 527 30 = = 82229 07041 (stops/restarts) 364 527 30 = = 82229 07041 09746 87574 84579 ... 43774 39461 40926 52814 98898 = = 527 30 //5735 kHz	MCW	(MPJ)
M01b	3-8	1915	Mon	5475	858 527 30 = = 82229 07041 ... //5150 kHz	MCW	(MPJ)
M01b	3-8	1915	Mon	5150	858 527 30 = = 82229 07041 ... //5475 kHz	MCW	(MPJ)
M01b	6-8	1942	Thu	5065	936 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5805 kHz	MCW	(MPJ)
M01b	6-8	1942	Thu	5805	936 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5065 kHz	MCW	(MPJ)
M01b	7-8	1902	Fri	5465	336 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5075 kHz	MCW	(MPJ)
M01b	7-8	1902	Fri	5075	336 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5465 kHz	MCW	(MPJ)
M01b	10-8	1915	Mon	5150	Carriers on 5150 & 5475 kHz; no MCW traffic	MCW	(MPJ)
M01b	10-8	1915	Mon	5475	Carriers on 5150 & 5475 kHz; no MCW traffic	MCW	(MPJ)
M01b	13-8	1830	Thu	5760	815 379 379 30 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 379 30 30 000 //5095 kHz	MCW	(MPJ)
M01b	13-8	1830	Thu	5095	815 379 379 30 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 379 30 30 000 //5760 kHz	MCW	(MPJ)
M01b	13-8	1942	Thu	5065	815 379 379 30 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 379 30 30 000 //5805 kHz	MCW	(MPJ)
M01b	13-8	1942	Thu	5805	815 379 379 30 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 379 30 30 000 //5065 kHz	MCW	(MPJ)
M01b	17-8	1810	Mon	5125	364 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5735 kHz	MCW	(MPJ)
M01b	17-8	1810	Mon	5735	364 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5125 kHz	MCW	(MPJ)
M01b	17-8	1915	Mon	5475	364 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5150 kHz	MCW	(MPJ)
M01b	17-8	1915	Mon	5150	364 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5475 kHz	MCW	(MPJ)
M01b	21-8	1902	Fri	5465	336 379 30 = = 03016 27233 96271 94539 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5075 kHz	MCW	(MPJ)
M01b	21-8	1902	Fri	5075	336 379 30 = = 03016 27233 96271 94539 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5465 kHz	MCW	(MPJ)
M01b	24-8	1810	Mon	5125	364 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5735 kHz	MCW	(MPJ)
M01b	24-8	1810	Mon	5735	364 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5125 kHz	MCW	(MPJ)
M01b	24-8	1915	Mon	5475	858 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5150 kHz	MCW	(MPJ)
M01b	24-8	1915	Mon	5150	858 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5475 kHz	MCW	(MPJ)
M01b	27-8	1942	Thu	5805	(Callup missed) 379 30 = = 03016 27233 96271 94559 14111 ... (End of recording lost). = = 379 30 000 //5065 kHz	MCW	(MPJ)
M01b	27-8	1942	Thu	5065	(Callup missed) 379 30 = = 03016 27233 96271 94559 14111 ... (End of recording lost). = = 379 30 000 //5805 kHz	MCW	(MPJ)
M01b	28-8	1902	Fri	5075	336 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5465 kHz	MCW	(MPJ)
M01b	28-8	1902	Fri	5465	336 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5075 kHz	MCW	(MPJ)
M01b	31-8	1810	Mon	5735	364 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5125 kHz	MCW	(MPJ)
M01b	31-8	1810	Mon	5125	364 379 30 = = 03016 27233 96271 94559 14111 ... 53813 58294 69690 95717 97222 = = 379 30 000 //5735 kHz	MCW	(MPJ)
M01b	31-8	1918	Mon	5150	858 379 30 = = 03016 27233 96271 94559 14111 ... Same old message //5475 kHz	MCW	(MPJ)
M01b	31-8	1918	Mon	5475	858 379 30 = = 03016 27233 96271 94559 14111 ... Same old message //5150 kHz	MCW	(MPJ)
M03	2-8	1420	Sun	15632	879/00 = = 000 (VVV at 1413 UTC)	CW	(AB/MPJ)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M03	3-8	1320	Mon	7727	543/00	CW	(MPJ)
M03	5-8	1320	Wed	7727	543/00 = = 000	CW	(AB)
M03	6-8	1320	Thu	7837	435/33 = = 03894 81176 58370 ... 74593 74968 75025 = = 435/33 = = rpt msg = = 000	CW	(AB)
M03	9-8	1320	Sun	7837	435/33 = = 03894 81176 58370 91691 29194 ... 25723 35363 74593 74968 75025 = = 435/33 (repeats) = = 000	CW	(AB)
M03	10-8	1320	Mon	7727	543/33 = = 13084 36220 06468 ... 80150 56097 69116 = = 543/33 = = rpt msg = = 000	CW	(AB)
M03	13-8	1320	Thu	7837	437/00 = = 000 (VVV at 1316 UTC)	CW	(AB/MPJ)
M03	14-8	1420	Fri	15632	879/31 = = 03496 24338 51807 ... 91880 25001 00563 = = 879/31 = = rpt msg = = 000	CW	(AB)
M03	16-8	1320	Sun	7837	437/00	CW	(AB/MPJ)
M03	16-8	1420	Sun	15632	879/31 = = 03496 24338 51807 ... 91880 25001 00563 = = 879/31 = = rpt msg = = 000	CW	(AB/MPJ)
M03	19-8	1320	Wed	7727	543/00 = = 000	CW	(AB)
M03	20-8	1320	Thu	7837	437/00	CW	(MPJ)
M03	21-8	1420	Fri	15632	879/00 = = 000	CW	(AB/MPJ)
M03	24-8	1320	Mon	7727	543/00 = = 000 (VVV at 1316 UTC)	CW	(AB/MPJ)
M03	26-8	1320	Wed	7727	543/00	CW	(MPJ)
M03	27-8	1320	Thu	7837	437/00 = = 000	CW	(MPJ)
M03	28-8	1420	Fri	15632	879/00 = = 000 (VVVV at 1414 UTC)	CW	(MPJ)
M03	31-8	1320	Mon	7727	543/00	CW	(MPJ)
M08a	4-8	2000	Tue	7554	i.p.	CW	(DSch)
M08a	5-8	2010	Wed	7554	i.p.	CW	(DSch)
M08a	6-8	1958	Thu	7554	NUIDA DIARN WANGA	CW	(DSch)
M08a	8-8	2000	Sat	7554	AGNRN DWTNN and into tfc	CW	(DSch)
M08a	9-8	2005	Sun	7554	i.p.	CW	(DSch)
M08a	12-8	2014	Wed	7554	i.p.	CW	(DSch)
M08a	15-8	2005	Sat	7554	i.p.	CW	(DSch)
M08a	15-8	2303	Sat	8009	Sending traffic then stops. Tunes xmtr and resumes with cut nbrs	CW	(DSch)
M08a	17-8	2010	Mon	7554	Starts into tfc. 1st msg very short. Then WIIAN and into text	CW	(DSch)
M08a	18-8	1949	Tue	7554	i.p.	CW	(DSch)
M08a	20-8	1958	Thu	7554	YL/SS announcing 5F grps then switches to M08a	CW	(DSch)
M08a	21-8	1957	Fri	7554	i.p.	CW	(DSch)
M08a	23-8	2259	Sun	8135	AGNRN NNWTA DWTNN and into tfc	CW	(DSch)
M08a	24-8	1558	Mon	7554	DDGNN URNUA WTRIN and into tfc	CW	(DSch)
M08a	25-8	2000	Tue	7554	DAIRA UUAGA WIWNN into tfc	CW	(DSch)
M08a	26-8	1357	Wed	8096	i.p.	CW	(DSch)
M08a	26-8	2300	Wed	8009	YL sig off then M08a sending ARDNN & into text	CW	(DSch)
M08a	27-8	1304	Thu	8096	Tuning transmitter. No traffic	CW	(DSch)
M08a	27-8	2300	Thu	8135	GADRN TUIGN AIANA and into cut nbrs msgs	CW	(DSch)
M08a	28-8	2001	Fri	7554	i.p.	CW	(DSch)
M08a	29-8	1959	Sat	7554	i.p.	CW	(DSch)
M08a	31-8	1406	Mon	8096	i.p.	CW	(DSch)
M12	1-8	1310	Sat	14468	451 1 9874 147 86361 58869 07212 ... 35911 67169 89718 000 000	CW	(AB/HFD)
M12	1-8	1330	Sat	13568	451 1 9874 147 86361 58869 07212 ... 35911 67169 89718	CW	(AB/HFD)
M12	1-8	1350	Sat	12178	451 1 9874 147 86361 58869 07212 ... 35911 67169 89718	CW	(AB/HFD)
M12	1-8	2110	Sat	13369	314 314 314 000	CW	(HFD)
M12	1-8	2130	Sat	12179	314 314 314 000	CW	(HFD)
M12	3-8	0430	Mon	5792	796 796 796 000	CW	(HFD)
M12	3-8	0450	Mon	6992	796 796 796 000	CW	(HFD)
M12	3-8	1700	Mon	11435	938 1 5208 114 22694 99508 37196 02233 23551 ... 80635 22057 16422 21994 74228 000 000	CW	(AB/MPJ/HFD)
M12	3-8	1720	Mon	10598	938 1 5208 114 22694 99508 37196 02233 23551 ... 80635 22057 16422 21994 74228 000 000	CW	(AB/MPJ/HFD)
M12	3-8	1740	Mon	9327	938 1 5208 114 22694 99508 37196 02233 23551 ... 80635 22057 16422 21994 74228 000 000	CW	(AB/MPJ/HFD)
M12	3-8	1750	Mon	9327	938 938 938 1 938 938 938 1 then stops. Operator error. Repeat of 1940 transmission on the same freq.	CW	(AB)
M12	3-8	1800	Mon	8047	463 1 5772 142 18687 65997 44292 34567 47343 ... 81253 65462 83015 39945 46202 000 000	CW	(MPJ/HFD)
M12	3-8	1820	Mon	6802	463 1 5772 142 18687 65997 44292 34567 47343 ... 81253 65462 83015 39945 46202 000 000	CW	(MPJ/HFD)
M12	3-8	1840	Mon	5788	463 1 5772 142 18687 65997 44292 34567 47343 ... 81253 65462 83015	CW	(MPJ/HFD)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
					39945 46202 000 000		
M12	3-8	1900	Mon	9176	257 1 3505 118 49734 30658 29732 95736 51071 ... 69125 39824 93688 07765 73764 000 000	CW	(MPJ/HFD)
M12	3-8	1920	Mon	7931	257 1 3505 118 49734 30658 29732 95736 51071 ... 69125 39824 93688 07765 73764 000 000	CW	(MPJ/HFD)
M12	3-8	1940	Mon	6904	257 1 3505 118 49734 30658 29732 95736 51071 ... 69125 39824 93688 07765 73764 000 000	CW	(MPJ/HFD)
M12	4-8	1930	Tue	10343	124 1 6150 64 43508 06495 84907 13770 95528 ... 80333 20561 91158 15004 45948 000 000	CW	(MPJ)
M12	4-8	1950	Tue	9264	124 1 6150 64 43508 06495 84907 13770 95528 ... 80333 20561 91158 15004 45948 000 000	CW	(MPJ)
M12	5-8	1800	Wed	9176	257 1 6567 131 66600 14238 41214 74808 11717 ... 85627 41494 59918 57063 56039 000 000	CW	(MPJ)
M12	5-8	1820	Wed	7931	257 1 6567 131 66600 14238 41214 74808 11717 ... 85627 41494 59918 57063 56039 000 000	CW	(MPJ)
M12	5-8	1840	Wed	6904	257 1 6567 131 66600 14238 41214 74808 11717 ... 85627 41494 59918 57063 56039 000 000	CW	(MPJ)
M12	5-8	1900	Wed	8047	463 1 7253 136 48658 57097 83231 36278 71544 ... 48189 73823 97313 58001 12804 000 000	CW	(MPJ)
M12	5-8	1920	Wed	6802	463 1 7253 136 48658 57097 83231 36278 71544 ... 48189 73823 97313 58001 12804 000 000	CW	(MPJ)
M12	5-8	1930	Wed	11435	938 1 9551 65 01084 08233 79722 28160 27594 ... 48189 73823 97313 58001 12804 000 000	CW	(MPJ)
M12	5-8	1940	Wed	5788	463 1 7253 136 48658 57097 83231 36278 71544 ... 48189 73823 97313 58001 12804 000 000	CW	(MPJ)
M12	5-8	1950	Wed	10598	938 1 9551 65 01084 08233 79722 28160 27594 ... 48189 73823 97313 58001 12804 000 000	CW	(MPJ)
M12	5-8	2100	Wed	8123	198 198 198 000	CW	(HFD)
M12	5-8	2120	Wed	6923	198 198 198 000	CW	(HFD)
M12	6-8	1500	Thu	13386	725 1 9660 130 35614 81148 39885 33073 60052 ... 94213 95449 94989 88449 35313 000 000	CW	(MPJ)
M12	6-8	1520	Thu	12189	725 1 9660 130 35614 81148 39885 33073 60052 ... 94213 95449 94989 88449 35313 000 000	CW	(MPJ)
M12	6-8	1540	Thu	11491	725 1 9660 130 35614 81148 39885 33073 60052 ... 94213 95449 94989 88449 35313 000 000	CW	(MPJ)
M12	6-8	1700	Thu	13386	725 1 9397 117 38678 51875 87552 98347 87216 ... 40759 14127 01360 39485 67442 000 000	CW	(MPJ)
M12	6-8	1720	Thu	12189	725 1 9397 117 38678 51875 87552 98347 87216 ... 40759 14127 01360 39485 67442 000 000	CW	(MPJ)
M12	6-8	1740	Thu	11491	725 1 9397 117 38678 51875 87552 98347 87216 ... 40759 14127 01360 39485 67442 000 000	CW	(MPJ)
M12	6-8	1900	Thu	10343	124 1 2777 106 90952 54192 77040 99275 09481 ... 30559 79607 97327 37990 12642 000 000	CW	(MPJ/HFD)
M12	6-8	1920	Thu	9264	124 1 2777 106 90952 54192 77040 99275 09481 ... 30559 79607 97327 37990 12642 000 000	CW	(MPJ/HFD)
M12	6-8	1940	Thu	8116	124 1 2777 106 90952 54192 77040 99275 09481 ... 30559 79607 97327 37990 12642 000 000	CW	(AB/MPJ/HFD)
M12	8-8	0500	Sat	9167	125 125 125 000	CW	(HFD)
M12	8-8	0520	Sat	10267	125 125 125 000	CW	(HFD)
M12	8-8	1310	Sat	14468	451 451 451 000	CW	(AB)
M12	8-8	1330	Sat	13568	451 451 451 000	CW	(AB)
M12	10-8	1140	Mon	14728	973 1 (R) 1569 139 1569 139 10701 10506 51830 ... 38708 89606 33980 000 000	CW	(AB)
M12	10-8	1840	Mon	5788	463 1 2033 150 97138 86634 7181_78 26304 ... 43295 28655 89480 80048 04357 000 000	CW	(MPJ)
M12	10-8	1900	Mon	9176	257 1 2014 107 82355 94252 00069 33856 37604 ... 75098 19625 15953 65857 71558 000 000	CW	(MPJ)
M12	10-8	1920	Mon	7931	257 1 2014 107 82355 94252 00069 33856 37604 ... 75098 19625 15953 65857 71558 000 000	CW	(MPJ)
M12	10-8	1940	Mon	6904	257 1 2014 107 82355 94252 00069 33856 37604 ... 75098 19625 15953 65857 71558 000 000	CW	(MPJ)
M12	11-8	1930	Tue	10343	124 1 7288 65 93684 58400 39760 65850 29552 ... 00365 59082 34594 06560 91805 000 000	CW	(MPJ)
M12	11-8	1950	Tue	9264	124 1 7288 65 93684 58400 39760 65850 29552 ... 00365 59082 34594 06560 91805 000 000	CW	(MPJ)
M12	13-8	0630	Thu	7484	402 402 402 000	CW	(HFD)
M12	13-8	0650	Thu	7484	402 402 402 000	CW	(HFD)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M12	13-8	1310	Thu	14468	451 451 451 000	CW	(MPJ)
M12	13-8	1330	Thu	13568	451 451 451 000	CW	(AB)
M12	13-8	1500	Thu	13386	725 1 (R) 3743 144 01642 10917 78551 ... 41179 24770 49196 000 000	CW	(AB/MPJ)
M12	13-8	1520	Thu	12189	725 1 (R) 3743 144 01642 10917 78551 ... 41179 24770 49196 000 000	CW	(MPJ)
M12	13-8	1540	Thu	11492	725 1 (R) 3743 144 01642 10917 78551 ... 41179 24770 49196 000 000	CW	(MPJ)
M12	13-8	1700	Thu	13386	725 1 (R) 5510 116 84089 27325 42178 ... 99115 76910 67521 000 000	CW	(AB/MPJ)
M12	13-8	1720	Thu	12189	725 1 (R) 5510 116 84089 27325 42178 ... 99115 76910 67521 000 000	CW	(MPJ)
M12	13-8	1740	Thu	11491	725 1 (R) 5510 116 84089 27325 42178 ... 99115 76910 67521 000 000	CW	(MPJ)
M12	13-8	1800	Thu	10343	124 1 4935 152 68088 28998 23609 98171 31011 ... 31580 16504 07074 76669 67073 000 000	CW	(MPJ)
M12	13-8	1820	Thu	9264	124 1 4935 152 68088 28998 23609 98171 31011 ... 31580 16504 07074 76669 67073 000 000	CW	(MPJ)
M12	13-8	1840	Thu	8116	124 1 4935 152 68088 28998 23609 98171 31011 ... 31580 16504 07074 76669 67073 000 000	CW	(MPJ)
M12	13-8	1900	Thu	10343	124 1 9635 110 72297 38978 80464 12520 91864 ... 75194 50326 50991 22326 11873 000 000	CW	(MP)
M12	13-8	1920	Thu	9264	124 1 9635 110 72297 38978 80464 12520 91864 ... 75194 50326 50991 22326 11873 000 000	CW	(MP)
M12	13-8	1940	Thu	8116	124 1 9635 110 72297 38978 80464 12520 91864 ... 75194 50326 50991 22326 11873 000 000	CW	(MP)
M12	17-8	1100	Mon	12205	973 1 4108 133 57580 21222 80282 ... 98477 51202 95384 000 000	CW	(AB)
M12	17-8	1120	Mon	13559	973 1 4108 133 57580 21222 80282 ... 98477 51202 95384 000 000	CW	(AB)
M12	17-8	1140	Mon	14728	973 1 4108 133 57580 21222 80282 ... 98477 51202 95384 000 000	CW	(AB)
M12	17-8	1800	Mon	8047	463 1 5827 152 10110 08405 20041 78898 68544 ... 43299 19159 72000 87584 17603 000 000	CW	(MPJ)
M12	17-8	1820	Mon	6802	463 1 5827 152 10110 08405 20041 78898 68544 ... 43299 19159 72000 87584 17603 000 000	CW	(MPJ)
M12	17-8	1840	Mon	5788	463 1 5827 152 10110 08405 20041 78898 68544 ... 43299 19159 72000 87584 17603 000 000	CW	(MPJ)
M12	17-8	1900	Mon	6904	257 1 4109 111 92349 58135 55550 20506 87553 ... 41765 10757 97974 80124 29585 000 000	CW	(MPJ)
M12	17-8	1900	Mon	9176	257 1 4109 111 92349 58135 55550 20506 87553 ... 41765 10757 97974 80124 29585 000 000	CW	(MPJ)
M12	17-8	1940	Mon	7931	257 1 4109 111 92349 58135 55550 20506 87553 ... 41765 10757 97974 80124 29585 000 000	CW	(MPJ)
M12	18-8	1950	Tue	9264	124 1 5842 54 67747 58620 41720 26349 14958 ... 06168 08779 25955 57671 11992 000 000	CW	(MPJ)
M12	19-8	1800	Wed	9176	... 36300 40560 44072 32483 58055 ... 65415 37955 37746 72605 05040 000 000	CW	(MPJ)
M12	19-8	1840	Wed	6904	257 1 9087 131 15834 80480 41428 61504 42369 ... 65415 37955 37746 72605 05040 000 000	CW	(MPJ)
M12	19-8	1900	Wed	8047	463 1 6203 147 17475 66875 96455 44656 01491 ... 71834 44935 43992 48620 01848 000 000	CW	(MPJ)
M12	19-8	1920	Wed	6802	463 1 6203 147 17475 66875 96455 44656 01491 ... 71834 44935 43992 48620 01848 000 000	CW	(MPJ)
M12	19-8	1930	Wed	11435	938 1 6438 67 29601 48224 68064 70584 99693 ... 81770 65989 73071 88161 91789 000 000	CW	(MPJ)
M12	19-8	1940	Wed	5788	463 1 6203 147 17475 66875 96455 44656 01491 ... 71834 44935 43992 48620 01848 000 000	CW	(MPJ)
M12	19-8	1950	Wed	10598	938 1 6438 67 29601 48224 68064 70584 99693 ... 81770 65989 73071 88161 91789 000 000	CW	(MPJ)
M12	20-8	1310	Thu	14468	451 1 4488 223 28772 06496 26387 97493 01664 ... 21175 96655 19410 99049 45474 000 000	CW	(MPJ)
M12	20-8	1330	Thu	13568	451 1 4488 223 28772 06496 26387 97493 01664 ... 21175 96655 19410 99049 45474 000 000	CW	(MPJ)
M12	20-8	1350	Thu	12178	451 1 4488 223 28772 06496 26387 97493 01664 ... 21175 96655 19410 99049 45474 000 000	CW	(MPJ)
M12	20-8	1500	Thu	13386	4238 130 15088 17943 52636 12830 56819 ... 16667 38828 88728 24220 17182 000 000	CW	(MPJ)
M12	20-8	1520	Thu	12189	4238 130 15088 17943 52636 12830 56819 ... 16667 38828 88728 24220 17182 000 000	CW	(MPJ)
M12	20-8	1540	Thu	11491	4238 130 15088 17943 52636 12830 56819 ... 16667 38828 88728 24220 17182 000 000	CW	(MPJ)
M12	20-8	1700	Thu	13386	725 1 9882 100 59218 97330 97698 92617 60651 ... 88964 89742 43098 59493 34669 000 000	CW	(MPJ)
M12	20-8	1720	Thu	12189	725 1 9882 100 59218 97330 97698 92617 60651 ... 88964 89742 43098 59493 34669 000 000	CW	(MPJ)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M12	20-8	1740	Thu	11491	725 1 9882 100 59218 97330 97698 92617 60651 ... 88964 89742 43098 59493 34669 000 000	CW	(MPJ)
M12	20-8	1800	Thu	10343	124 1 1471 145 85007 51354 90737 14686 42595 ... 98520 83756 61536 28113 65766	CW	(MPJ)
M12	20-8	1820	Thu	9264	124 1 1471 145 85007 51354 90737 14686 42595 ... 98520 83756 61536 28113 65766	CW	(MPJ)
M12	20-8	1900	Thu	10343	124 1 7102 106 27734 10242 73662 98572 47319 ... 38560 37804 17740 02280 72764 000 000	CW	(MPJ)
M12	20-8	1920	Thu	9264	124 1 7102 106 27734 10242 73662 98572 47319 ... 38560 37804 17740 02280 72764 000 000	CW	(MPJ)
M12	20-8	1940	Thu	8116	124 1 7102 106 27734 10242 73662 98572 47319 ... 38560 37804 17740 02280 72764 000 000	CW	(MPJ)
M12	22-8	1350	Sat	12178	451 1 4488 223 28772 06496 26387 97493 01664 ... 21175 96655 19410 99049 45474 000 000	CW	(MPJ)
M12	24-8	1100	Mon	12205	973 1 4973 129 92658 31555 47906 ... 53556 53761 83983 000 000	CW	(AB/MPJ)
M12	24-8	1120	Mon	13559	973 1 4973 129 92658 31555 47906 ... 53556 53761 83983 000 000	CW	(AB/MPJ)
M12	24-8	1140	Mon	14728	973 1 4973 129 92658 31555 47906 ... 53556 53761 83983 000 000	CW	(AB/MPJ)
M12	24-8	1720	Mon	10198	938 4492 114 36808 55389 91851 17005 90298 ... 10690 72907 66620 82113 41010 000 000	CW	(MPJ)
M12	24-8	1740	Mon	9327	938 4492 114 36808 55389 91851 17005 90298 ... 10690 72907 66620 82113 41010 000 000	CW	(MPJ)
M12	24-8	1800	Mon	8047	463 1 6967 155 77589 32700 41653 37957 71526 ... 37408 35121 09012 96042 35195 000 000	CW	(MPJ/PPA)
M12	24-8	1820	Mon	6802	463 1 6967 155 77589 32700 41653 37957 71526 ... 37408 35121 09012 96042 35195 000 000	CW	(MPJ)
M12	24-8	1840	Mon	5788	463 1 6967 155 77589 32700 41653 37957 71526 ... 37408 35121 09012 96042 35195 000 000	CW	(MPJ)
M12	24-8	1900	Mon	9176	257 1 2035 108 34739 56457 66444 53129 59888 ... 80666 29981 02481 02165 10662 000 000	CW	(MPJ)
M12	24-8	1920	Mon	7931	257 1 2035 108 34739 56457 66444 53129 59888 ... 80666 29981 02481 02165 10662 000 000	CW	(MPJ)
M12	24-8	1940	Mon	6904	257 1 2035 108 34739 56457 66444 53129 59888 ... 80666 29981 02481 02165 10662 000 000	CW	(MPJ)
M12	25-8	1930	Tue	10343	124 1 8720 62 58740 79248 28499 56818 85887 ... 97090 57401 66328 09440 03362 000 000	CW	(MPJ)
M12	25-8	1950	Tue	9264	124 1 8720 62 58740 79248 28499 56818 85887 ... 97090 57401 66328 09440 03362 000 000	CW	(MPJ)
M12	26-8	1800	Wed	9176	257 1 9063 136 62732 04370 19405 52962 06327 ... 92086 95551 89852 80297 39708 000 000	CW	(MPJ)
M12	26-8	1820	Wed	7931	257 1 9063 136 62732 04370 19405 52962 06327 ... 92086 95551 89852 80297 39708 000 000	CW	(MPJ)
M12	26-8	1840	Wed	6904	257 1 9063 136 62732 04370 19405 52962 06327 ... 92086 95551 89852 80297 39708 000 000	CW	(MPJ)
M12	26-8	1900	Wed	8047	463 1 5906 136 20001 09236 66064 15903 45602 ... 15494 65875 60271 22729 58265 000 000	M12	(MPJ)
M12	26-8	1920	Wed	6802	463 1 5906 136 20001 09236 66064 15903 45602 ... 15494 65875 60271 22729 58265 000 000	M12	(MPJ)
M12	26-8	1930	Wed	11435	938 1 49595 32188 06672 81712 77568 09586 ... 48087 17728 75124 08906 97636 000 000	CW	(MPJ)
M12	26-8	1950	Wed	10598	938 1 49595 32188 06672 81712 77568 09586 ... 48087 17728 75124 08906 97636 000 000	CW	(MPJ)
M12	27-8	1310	Thu	14468	451 451 451 000	CW	(MPJ)
M12	27-8	1330	Thu	13568	451 451 451 000	CW	(MPJ)
M12	27-8	1500	Thu	13386	725 1 9106 116 58154 07224 13361 51936 34111 ... 56359 58221 81234 15556 66802 000 000	CW	(MPJ)
M12	27-8	1520	Thu	12189	725 1 9106 116 58154 07224 13361 51936 34111 ... 56359 58221 81234 15556 66802 000 000	CW	(MPJ)
M12	27-8	1540	Thu	11491	725 1 9106 116 58154 07224 13361 51936 34111 ... 56359 58221 81234 15556 66802 000 000	CW	(MPJ)
M12	27-8	1700	Thu	13386	725 1 1099 103 57183 10980 30921 92023 90554 ... 13133 33079 11206 88973 01708 000 000	CW	(MPJ)
M12	27-8	1720	Thu	12189	725 1 1099 103 57183 10980 30921 92023 90554 ... 13133 33079 11206 88973 01708 000 000	CW	(MPJ)
M12	27-8	1740	Thu	11491	725 1 1099 103 57183 10980 30921 92023 90554 ... 13133 33079 11206 88973 01708 000 000	CW	(MPJ)
M12	27-8	1800	Thu	10343	124 1 4609 147 81531 95018 64014 97407 33348 ... 43881 46335 29543 16141 91413 000 000	CW	(MPJ)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M12	27-8	1820	Thu	9264	124 1 4609 147 81531 95018 64014 97407 33348 ... 43881 46335 29543 16141 91413 000 000	CW	(MPJ)
M12	27-8	1840	Thu	8116	124 1 4609 147 81531 95018 64014 97407 33348 ... 43881 46335 29543 16141 91413 000 000	CW	(MPJ)
M12	27-8	1900	Thu	10343	124 1 7129 103 28998 61976 50002 5_59_ 59246 ... 9371_ 17_28 ... 000 000	CW	(MPJ)
M12	27-8	1920	Thu	9264	124 1 7129 103 28998 61976 50002 5_59_ 59246 ... 9371_ 17_28 ... 000 000	CW	(MPJ)
M12	29-8	1310	Sat	14468	451 451 451 000	CW	(MPJ)
M12	29-8	1330	Sat	13568	451 451 451 000	CW	(MPJ)
M12	31-8	1100	Mon	12205	973 1 3262 141 61084 75773 83175 46690 31015 ... 01199 80744 11009 24283 74073 000 000	CW	(MPJ)
M12	31-8	1120	Mon	13559	973 1 3262 141 61084 75773 83175 46690 31015 ... 01199 80744 11009 24283 74073 000 000	CW	(MPJ)
M12	31-8	1140	Mon	14728	973 1 3262 141 61084 75773 83175 46690 31015 ... 01199 80744 11009 24283 74073 000 000	CW	(MPJ)
M12	31-8	1700	Mon	11435	938 1 7678 113 24224 80602 84434 62867 15705 ... 84195 36663 49242 54569 67231 000 000	CW	(MPJ)
M12	31-8	1720	Mon	10598	938 1 7678 113 24224 80602 84434 62867 15705 ... 84195 36663 49242 54569 67231 000 000	CW	(MPJ)
M12	31-8	1740	Mon	9327	938 1 7678 113 24224 80602 84434 62867 15705 ... 84195 36663 49242 54569 67231 000 000	CW	(MPJ)
M12	31-8	1800	Mon	8047	463 1 5751 152 90871 29853 70585 78858 28418 ... 81104 31934 37180 36989 26232 000 000	CW	(MPJ)
M12	31-8	1820	Mon	6802	463 1 5751 152 90871 29853 70585 78858 28418 ... 81104 31934 37180 36989 26232 000 000	CW	(MPJ)
M12	31-8	1840	Mon	5788	463 1 5751 152 90871 29853 70585 78858 28418 ... 81104 31934 37180 36989 26232 000 000	CW	(MPJ)
M12	31-8	1900	Mon	9176	257 1 1442 118 09818 24271 82320 18147 12545 ... 61480 55565 46606 80640 73656 000 000	CW	(MPJ)
M12	31-8	1920	Mon	7931	257 1 1442 118 09818 24271 82320 18147 12545 ... 61480 55565 46606 80640 73656 000 000	CW	(MPJ)
M12	31-8	1940	Mon	6904	257 1 1442 118 09818 24271 82320 18147 12545 ... 61480 55565 46606 80640 73656 000 000	CW	(MPJ)
M14	7-8	1700	Fri	7485	382 382 382 00000	CW	(AB)
M14	7-8	1800	Fri	6891	382 382 382 00000	CW	(AB/MPJ)
M14	9-8	0700	Sun	8162	382 382 382 0000	CW	(AB)
M14	9-8	2300	Sun	5240	376 (R) 524 524 020 020 83295 26704 14838 ... 14238 26365 23051 524 524 020 020 00000	CW	(AB)
M14	10-8	0000	Mon	5825	376 (R) 524 524 020 020 83295 26704 14838 ... 14238 26365 23051 524 524 020 020 00000	CW	(AB)
M14	11-8	1820	Tue	6856	163 972 020 43765 19832 72308 59265 71534 ... 48810 52981 48206 28881 93711 972 020 00000	MCW	(MPJ)
M14	16-8	2000	Sun	9241	381 725 60 = = 09603 14016 18316 44803 68364 ... 92957 53705 14422 99246 88486 = = 725 60 00000	CW	(MPJ)
M14	21-8	1700	Fri	7485	382 382 382 00000	MCW	(AB/MPJ)
M14	21-8	1800	Fri	6891	382 382 382 00000	MCW	(AB/MPJ)
M14	25-8	1820	Tue	6856	163 972 020 43765 19832 72308 ... 52981 48206 28881 93711 972 020 00000	MCW	(MPJ)
M14	26-8	1920	Wed	5938	417 592 020 27856 43321 93276 50908 41178 ... 60221 92770 29845 10456 72878 592 020 00000	CW	(MPJ)
M21	24-8	1138	Mon	6440	=991437??0????? =991438??0?????	CW	(JPL-Sib)
M32	10-8	1701	Mon	3350	DE WEGI FOR QRJ3 K. VXN8 DE WEGI K. PKXR DE WEGI K. R K	CW	(JPL-Sib)
M32	10-8	1908	Mon	3876	///10011 = AR RHI86 K. RHI86 OK QRU K. VV RJD52 DE RJU79 QSA QTC K. RJU79 775 20 10 2200 775 = FM RJU79 FOR RJD52 RJD88 =	CW	(JPL-Sib)
M32	22-8	2216	Sat	6767	MQK8 DE TSWM QTC K. QSV K. TSWM 448 18 23 0102 448 = 574 = MMMMM NCWHR FIQCV ...	CW	(JPL-Sib)
M32	24-8	2215	Mon	3511	N3HW DE RXN8 K	CW	(JPL-Sib)
M32	27-8	1706	Thu	8024	JT8N DE 9ANO QSA NO K	CW	(MPJ)
M32	28-8	1634	Fri	3350	VVV HKNK DE CR2S K	CW	(JPL-Sib)
M32a	18-8	0554	Tue	12464	RMRV navy ship Smolny (887): vvv rit de rmr v k	CW	(WP3)
M32a	18-8	0621	Tue	12464	RFH71 LS Novocherkassk (142): rcv de rfh71 k qsa2 qyt4 qsx 8192 k	CW	(WP3)
M32a	18-8	0646	Tue	8345	rit de rmm91 qsa? qtc k rmp de rmm91 qsa? qtc k	CW	(WP3)
M32a	19-8	1230	Wed	12464	RCIG 111 16 19 1500 111 = SML FOR RJH45 RJE73 = 19121 99362 10113 42998 03403 10340 40163 54000 70000 80000 2226. 299// 19012 = + RCIG K	CW	(Pat/Tom)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M32a	20-8	2015	Thu	8345	RCV RCV RCV DE RMRV K. RMRV QSA4 QYT4 QSX 10984 OK ? K	CW	(Pat)
M32a	22-8	2204	Sat	6948	RLO RLO RLO DE RIT RIT QTC 313 2. 23 0048 313 = RADIOPROGNOZ 23008 03003 ...	CW	(JPL-Sib)
M32b	18-8	0943	Tue	8816	rjf94 rjc38 de 54395 qql XLWC 0940 qbd 13400 qre XUMO 1045 k - qqm XUMO 1039 sk	CW	(WP3)
M32b	18-8	1500	Tue	8816	08498 DE RJF94 QSA 3 QRV K. RJF94 QTO 1500 QRD XMWH XUMB QRE 1830 QBD 16000 K	CW	(Pat)
M41	22-8	1234	Sat	8747	i.p. AQKP DE ZEY5 K. QSA 2 QSA? WZD QRJ? K. ZEY5 524 35 22 1533 524 = ZSL FOR 561 552 FM 392 724 429 =	CW	(JPL-HK)
M42	11-8	0915	Tue	9140	RUU70: Russian PtP station. Crypto link to RRF30	FSK 100/500	(PPA)
M42d	26-8	1200	Wed	10394	Russian Diplo/Intel	FSK 200/1000	(MPJ)
M42d	29-8	1110	Sat	14751	Russian diplo/intel.	FSK 200/1000	(MPJ)
M42b	21-8	0504	Fri	9045	Duplex CW contact OK QRV QTC1 ZCZ ZVP into RTTY transmitting 5FG message using =50= seperator	FSK 50/500	(PPA)
M42c	1-8	1200	Sat	17480	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB/HFD)
M42c	1-8	1210	Sat	15965	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB/HFD)
M42c	1-8	1220	Sat	13394	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB/HFD)
M42c	1-8	1810	Sat	15929	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	1-8	1820	Sat	13450	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB/HFD)
M42c	1-8	1830	Sat	11091	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB/HFD)
M42c	6-8	1900	Thu	10826	Russian diplo/intel. RYRYRY 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	6-8	1910	Thu	8142	Russian diplo/intel. RYRYRY 5761 00000+++++++162)	FSK 200/500	(AB/MPJ)
M42c	6-8	1920	Thu	5801	Russian diplo/intel. RYRYRY 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	8-8	1200	Sat	17480	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	8-8	1210	Sat	15965	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	8-8	1220	Sat	13394	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	8-8	1810	Sat	15929	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	8-8	1820	Sat	13450	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	8-8	1830	Sat	11091	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	15-8	1200	Sat	17480	Russian diplo/intel. RYRYRY 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	15-8	1210	Sat	15965	Russian diplo/intel. RYRYRY 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	15-8	1220	Sat	13394	Russian diplo/intel. RYRYRY 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	20-8	1900	Thu	10826	Russian diplo/intel. RYRYRY 5761 00000+++++++162)	FSK 200/500	(AB/HFD)
M42c	20-8	1910	Thu	8142	Russian diplo/intel. RYRYRY 5761 00000+++++++162)	FSK 200/500	(AB/HFD)
M42c	20-8	1920	Thu	5801	Russian diplo/intel. RYRYRY 5761 00000+++++++162)	FSK 200/500	(AB/HFD)
M42c	22-8	1200	Sat	17480	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	22-8	1210	Sat	15965	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	22-8	1220	Sat	13394	Russian diplo/intel. 5761 00000+++++++162)	FSK 200/500	(AB)
M42c	22-8	1810	Sat	15931	Russian diplo/intel	FSK 200/500	(HFD)
M42d	1-8	2100	Sat	16287	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
M42d	1-8	2110	Sat	14459	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
M42d	1-8	2120	Sat	12174	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
M42d	2-8	1530	Sun	17426	Russian diplo/intel. Msg 127 on link 20501	FSK 200/1000	(AB)
M42d	2-8	1540	Sun	15661	Russian diplo/intel. Msg 127 on link 20501	FSK 200/1000	(AB)
M42d	2-8	1550	Sun	13422	Russian diplo/intel. Msg 127 on link 20501	FSK 200/1000	(AB)
M42d	3-8	0400	Mon	12062	Russian diplo/intel. Msg 012 on link 45079	FSK 200/1000	(AB)
M42d	3-8	0410	Mon	10321	Russian diplo/intel. Msg 012 on link 45079	FSK 200/1000	(AB)
M42d	3-8	0420	Mon	8022	Russian diplo/intel. Msg 012 on link 45079	FSK 200/1000	(AB)
M42d	3-8	0700	Mon	11074	Russian diplo/intel. Msg 172 on link 45137	FSK 200/1000	(AB)
M42d	3-8	0710	Mon	9051	Russian diplo/intel. Msg 172 on link 45137	FSK 200/1000	(AB)
M42d	3-8	0720	Mon	7384	Russian diplo/intel. Msg 172 on link 45137	FSK 200/1000	(AB)
M42d	3-8	1200	Mon	10392	Russian diplo/intel. Msg 172 on link 45137	FSK 200/1000	(AB)
M42d	4-8	0700	Tue	11074	Russian diplo/intel. Msg 175 on link 45137	FSK 200/1000	(AB)
M42d	4-8	0710	Tue	9051	Russian diplo/intel. Msg 175 on link 45137	FSK 200/1000	(AB)
M42d	4-8	0720	Tue	7384	Russian diplo/intel. Msg 175 on link 45137	FSK 200/1000	(AB)
M42d	4-8	1200	Tue	10392	Russian diplo/intel. Msg 175 on link 45137	FSK 200/1000	(AB/MPJ)
M42d	4-8	1210	Tue	8074	Russian diplo/intel. Msg 175 on link 45137	FSK 200/1000	(AB)
M42d	4-8	1220	Tue	6766	Russian diplo/intel. Msg 175 on link 45137	FSK 200/1000	(AB)
M42d	4-8	1410	Tue	16046	Russian diplo/intel. Msg 092 on link 32799	FSK 200/1000	(AB)
M42d	4-8	1420	Tue	14389	Russian diplo/intel. Msg 092 on link 32799	FSK 200/1000	(AB)
M42d	4-8	1650	Tue	17429	Russian diplo/intel. Msg 142 on link 20501	FSK 200/1000	(AB)
M42d	4-8	1700	Tue	15840	Russian diplo/intel. Msg 142 on link 20501	FSK 200/1000	(AB)
M42d	4-8	1710	Tue	13406	Russian diplo/intel. Msg 142 on link 20501	FSK 200/1000	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M42d	5-8	0700	Wed	11074	Russian diplo/intel. Msg 180 on link 45137	FSK 200/1000	(AB)
M42d	5-8	0710	Wed	9051	Russian diplo/intel. Msg 180 on link 45137	FSK 200/1000	(AB)
M42d	5-8	0720	Wed	7384	Russian diplo/intel. Msg 180 on link 45137	FSK 200/1000	(AB)
M42d	5-8	0800	Wed	15936	Russian diplo/intel. Msg 135 on link 45075	FSK 200/1000	(AB)
M42d	5-8	0810	Wed	13552	Russian diplo/intel. Msg 135 on link 45075	FSK 200/1000	(AB)
M42d	5-8	0820	Wed	11459	Russian diplo/intel. Msg 135 on link 45075	FSK 200/1000	(AB)
M42d	5-8	1200	Wed	10392	Russian diplo/intel. Msg 180 on link 45137	FSK 200/1000	(AB)
M42d	5-8	1210	Wed	8074	Russian diplo/intel. Msg 180 on link 45137	FSK 200/1000	(AB)
M42d	5-8	1220	Wed	6766	Russian diplo/intel. Msg 180 on link 45137	FSK 200/1000	(AB)
M42d	5-8	1230	Wed	17453	Russian diplo/intel. Msg 002 on link 53277	FSK 200/1000	(AB)
M42d	5-8	1240	Wed	15921	Russian diplo/intel. Msg 002 on link 53277	FSK 200/1000	(AB)
M42d	5-8	1250	Wed	13386	Russian diplo/intel. Msg 002 on link 53277	FSK 200/1000	(AB)
M42d	6-8	0700	Thu	11074	Russian diplo/intel. Msg 182 on link 45136	FSK 200/1000	(AB)
M42d	6-8	0710	Thu	9051	Russian diplo/intel. Msg 182 on link 45136	FSK 200/1000	(AB)
M42d	6-8	0720	Thu	7384	Russian diplo/intel. Msg 182 on link 45136	FSK 200/1000	(AB)
M42d	6-8	1330	Thu	11136	Russian diplo/intel. Msg 117 on link 49237	FSK 200/1000	(AB)
M42d	6-8	1330	Thu	13437	Russian diplo/intel. Msg 117 on link 49237	FSK 200/1000	(AB)
M42d	6-8	1330	Thu	9242	Russian diplo/intel. Msg 117 on link 49237	FSK 200/1000	(AB)
M42d	7-8	0700	Fri	11074	Russian diplo/intel. Msg 185 on link 45137	FSK 200/1000	(AB)
M42d	7-8	0710	Fri	9051	Russian diplo/intel. Msg 185 on link 45137	FSK 200/1000	(AB)
M42d	7-8	0720	Fri	7384	Russian diplo/intel. Msg 185 on link 45137	FSK 200/1000	(AB)
M42d	8-8	0800	Sat	17443	Russian diplo/intel. Msg 035 on link 45115	FSK 200/1000	(AB)
M42d	8-8	0810	Sat	15939	Russian diplo/intel. Msg 035 on link 45115	FSK 200/1000	(AB)
M42d	8-8	0820	Sat	13318	Russian diplo/intel. Msg 035 on link 45115	FSK 200/1000	(AB)
M42d	8-8	0900	Sat	16184	Russian diplo/intel. Msg 185 on link 45057	FSK 200/1000	(AB)
M42d	8-8	0910	Sat	14569	Russian diplo/intel. Msg 185 on link 45057	FSK 200/1000	(AB)
M42d	8-8	0920	Sat	12193	Russian diplo/intel. Msg 185 on link 45057	FSK 200/1000	(AB)
M42d	8-8	1100	Sat	15613	Russian diplo/intel. Msg 055 on link 36882	FSK 200/1000	(AB)
M42d	8-8	1110	Sat	14751	Russian diplo/intel. Msg 055 on link 36882	FSK 200/1000	(AB)
M42d	8-8	1120	Sat	13351	Russian diplo/intel. Msg 055 on link 36882	FSK 200/1000	(AB)
M42d	9-8	0700	Sun	11074	Russian diplo/intel. Msg 187 on link 45137	FSK 200/1000	(AB)
M42d	9-8	0710	Sun	9051	Russian diplo/intel. Msg 187 on link 45137	FSK 200/1000	(AB)
M42d	9-8	0720	Sun	7384	Russian diplo/intel. Msg 187 on link 45137	FSK 200/1000	(AB)
M42d	9-8	0800	Sun	17443	Russian diplo/intel. Msg 035 on link 45115	FSK 200/1000	(AB)
M42d	9-8	0810	Sun	15939	Russian diplo/intel. Msg 035 on link 45115	FSK 200/1000	(AB)
M42d	9-8	0820	Sun	13318	Russian diplo/intel. Msg 035 on link 45115	FSK 200/1000	(AB)
M42d	9-8	0900	Sun	16184	Russian diplo/intel. Msg 185 on link 45057	FSK 200/1000	(AB)
M42d	9-8	0910	Sun	14569	Russian diplo/intel. Msg 185 on link 45057	FSK 200/1000	(AB)
M42d	9-8	0920	Sun	12193	Russian diplo/intel. Msg 185 on link 45057	FSK 200/1000	(AB)
M42d	9-8	1100	Sun	15613	Russian diplo/intel. Msg 055 on link 36882	FSK 200/1000	(AB)
M42d	9-8	1110	Sun	14751	Russian diplo/intel. Msg 055 on link 36882	FSK 200/1000	(AB)
M42d	9-8	1120	Sun	13351	Russian diplo/intel. Msg 055 on link 36882	FSK 200/1000	(AB)
M42d	9-8	1550	Sun	13422	Russian diplo/intel. Msg 127 on link 20501	FSK 200/1000	(AB)
M42d	9-8	2000	Sun	9239	Russian diplo/intel. Msg 037 on link 24584	FSK 200/1000	(AB)
M42d	9-8	2010	Sun	7782	Russian diplo/intel. Msg 037 on link 24584	FSK 200/1000	(AB)
M42d	9-8	2020	Sun	6779	Russian diplo/intel. Msg 037 on link 24584	FSK 200/1000	(AB)
M42d	10-8	1200	Mon	10392	Russian diplo/intel. Msg 187 on link 45137	FSK 200/1000	(AB)
M42d	10-8	1210	Mon	8074	Russian diplo/intel. Msg 187 on link 45137	FSK 200/1000	(AB)
M42d	10-8	1220	Mon	6766	Russian diplo/intel. Msg 187 on link 45137	FSK 200/1000	(AB)
M42d	10-8	1530	Mon	17426	Russian diplo/intel. Msg 127 on link 20501	FSK 200/1000	(AB)
M42d	10-8	1540	Mon	15661	Russian diplo/intel. Msg 127 on link 20501	FSK 200/1000	(AB)
M42d	10-8	1550	Mon	13422	Russian diplo/intel. Msg 127 on link 20501	FSK 200/1000	(AB)
M42d	11-8	0700	Tue	11074	Russian diplo/intel. Msg 190 on link 45136	FSK 200/1000	(AB)
M42d	11-8	0710	Tue	9051	Russian diplo/intel. Msg 190 on link 45136	FSK 200/1000	(AB)
M42d	11-8	0720	Tue	7384	Russian diplo/intel. Msg 190 on link 45136	FSK 200/1000	(AB)
M42d	11-8	1200	Tue	10392	Russian diplo/intel. Msg 190 on link 45136	FSK 200/1000	(AB)
M42d	11-8	1210	Tue	8074	Russian diplo/intel. Msg 190 on link 45136	FSK 200/1000	(AB)
M42d	11-8	1220	Tue	6766	Russian diplo/intel. Msg 190 on link 45136	FSK 200/1000	(AB)
M42d	11-8	1400	Tue	18761	Russian diplo/intel. Msg 092 on link 32799	FSK 200/1000	(AB)
M42d	11-8	1410	Tue	16046	Russian diplo/intel. Msg 092 on link 32799	FSK 200/1000	(AB)
M42d	11-8	1420	Tue	14389	Russian diplo/intel. Msg 092 on link 32799	FSK 200/1000	(AB)
M42d	11-8	1650	Tue	17429	Russian diplo/intel. Msg 142 on link 20501	FSK 200/1000	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrlb
M42d	11-8	1700	Tue	15840	Russian diplo/intel. Msg 142 on link 20501	FSK 200/1000	(AB)
M42d	11-8	1710	Tue	13406	Russian diplo/intel. Msg 142 on link 20501	FSK 200/1000	(AB)
M42d	12-8	0150	Wed	16320	Russian diplo/intel.	FSK 200/1000	(Dan)
M42d	12-8	0700	Wed	11075	Russian diplo/intel.	FSK 200/1000	(AB)
M42d	12-8	0710	Wed	9052	Russian diplo/intel.	FSK 200/1000	(AB)
M42d	12-8	0720	Wed	7385	Russian diplo/intel.	FSK 200/1000	(AB)
M42d	12-8	0800	Wed	15936	Russian diplo/intel. Msg 062 on link 45075	FSK 200/1000	(AB)
M42d	12-8	0800	Wed	17467	Russian diplo/intel. Msg 222 on link 16405	FSK 200/1000	(AB)
M42d	12-8	0810	Wed	13552	Russian diplo/intel. Msg 062 on link 45075	FSK 200/1000	(AB)
M42d	12-8	0810	Wed	15909	Russian diplo/intel. Msg 222 on link 16405	FSK 200/1000	(AB)
M42d	12-8	0820	Wed	11459	Russian diplo/intel. Msg 062 on link 45075	FSK 200/1000	(AB)
M42d	12-8	0820	Wed	13580	Russian diplo/intel. Msg 222 on link 16405	FSK 200/1000	(AB)
M42d	12-8	0925	Wed	14461	Russian diplo/intel. Msg 065 on link 20492	FSK 200/1000	(AB)
M42d	12-8	0935	Wed	12194	Russian diplo/intel. Msg 065 on link 20492	FSK 200/1000	(AB)
M42d	12-8	1200	Wed	10392	Russian diplo/intel. Msg 195 on link 45137	FSK 200/1000	(AB)
M42d	12-8	1210	Wed	8074	Russian diplo/intel. Msg 195 on link 45137	FSK 200/1000	(AB)
M42d	12-8	1220	Wed	6766	Russian diplo/intel. Msg 195 on link 45137	FSK 200/1000	(AB)
M42d	12-8	1400	Wed	18761	Russian diplo/intel. Msg 092 on link 32799	FSK 200/1000	(AB)
M42d	12-8	1410	Wed	16046	Russian diplo/intel. Msg 092 on link 32799	FSK 200/1000	(AB)
M42d	12-8	1420	Wed	14389	Russian diplo/intel. Msg 092 on link 32799	FSK 200/1000	(AB)
M42d	12-8	1650	Wed	17429	Russian diplo/intel. Msg 142 on link 20501	FSK 200/1000	(AB)
M42d	12-8	1700	Wed	15840	Russian diplo/intel. Msg 142 on link 20501	FSK 200/1000	(AB)
M42d	12-8	1710	Wed	13406	Russian diplo/intel. Msg 142 on link 20501	FSK 200/1000	(AB)
M42d	12-8	2200	Wed	15615	Russian diplo/intel. Msg 110 on link 49202	FSK 200/1000	(AB)
M42d	12-8	2200	Wed	13372	Russian diplo/intel. Msg 110 on link 49202	FSK 200/1000	(AB)
M42d	12-8	2220	Wed	11079	Russian diplo/intel. Msg 110 on link 49202	FSK 200/1000	(AB)
M42d	13-8	0700	Thu	11074	Russian diplo/intel. Msg 197 on link 45136	FSK 200/1000	(AB)
M42d	13-8	0710	Thu	9051	Russian diplo/intel. Msg 197 on link 45136	FSK 200/1000	(AB)
M42d	13-8	0720	Thu	7384	Russian diplo/intel. Msg 197 on link 45136	FSK 200/1000	(AB)
M42d	13-8	0800	Thu	17467	Russian diplo/intel. Msg 222 on link 16405	FSK 200/1000	(AB)
M42d	13-8	0810	Thu	15909	Russian diplo/intel. Msg 222 on link 16405	FSK 200/1000	(AB)
M42d	13-8	0820	Thu	13580	Russian diplo/intel. Msg 222 on link 16405	FSK 200/1000	(AB)
M42d	13-8	1200	Thu	10392	Russian diplo/intel. Msg 182 on link 45136	FSK 200/1000	(AB)
M42d	13-8	1210	Thu	8074	Russian diplo/intel. Msg 182 on link 45136	FSK 200/1000	(AB)
M42d	13-8	1220	Thu	6766	Russian diplo/intel. Msg 182 on link 45136	FSK 200/1000	(AB)
M42d	13-8	1330	Thu	13437	Russian diplo/intel. Msg 117 on link 49237	FSK 200/1000	(AB)
M42d	13-8	1330	Thu	13437	Russian diplo/intel. Msg 117 on link 49237	FSK 200/1000	(AB)
M42d	13-8	1340	Thu	11136	Russian diplo/intel. Msg 117 on link 49237	FSK 200/1000	(AB)
M42d	13-8	1340	Thu	11136	Russian diplo/intel. Msg 117 on link 49237	FSK 200/1000	(AB)
M42d	13-8	1350	Thu	9242	Russian diplo/intel. Msg 117 on link 49237	FSK 200/1000	(AB/MPJ)
M42d	13-8	1350	Thu	9242	Russian diplo/intel. Msg 117 on link 49237	FSK 200/1000	(AB/MPJ)
M42d	14-8	0600	Fri	15944	Russian diplo/intel. Msg 142 on link 40988	FSK 200/1000	(AB)
M42d	14-8	0610	Fri	13559	Russian diplo/intel. Msg 142 on link 40988	FSK 200/1000	(AB)
M42d	14-8	0620	Fri	11146	Russian diplo/intel. Msg 142 on link 40988	FSK 200/1000	(AB)
M42d	15-8	1100	Sat	15613	Russian diplo/intel. Msg 057 on link 36882	FSK 200/1000	(AB/MPJ)
M42d	15-8	1110	Sat	14751	Russian diplo/intel. Msg 057 on link 36882	FSK 200/1000	(AB/MPJ)
M42d	15-8	1120	Sat	13351	Russian diplo/intel. Msg 057 on link 36882	FSK 200/1000	(AB/MPJ)
M42d	15-8	2100	Sat	16287	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
M42d	15-8	2110	Sat	14459	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
M42d	15-8	2120	Sat	12174	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
M42d	16-8	1530	Sun	17426	Russian diplo/intel. Msg 130 on link 20501	FSK 200/1000	(AB)
M42d	16-8	1540	Sun	15661	Russian diplo/intel. Msg 130 on link 20501	FSK 200/1000	(AB)
M42d	16-8	1550	Sun	13422	Russian diplo/intel. Msg 130 on link 20501	FSK 200/1000	(AB/MPJ)
M42d	17-8	0700	Mon	11074	Russian diplo/intel. Msg 202 on link 45136	FSK 200/1000	(AB)
M42d	17-8	0710	Mon	9051	Russian diplo/intel. Msg 202 on link 45136	FSK 200/1000	(AB)
M42d	17-8	0720	Mon	7384	Russian diplo/intel. Msg 202 on link 45136	FSK 200/1000	(AB)
M42d	17-8	1200	Mon	10392	Russian diplo/intel. Msg 202 on link 45136	FSK 200/1000	(AB)
M42d	17-8	1210	Mon	8074	Russian diplo/intel. Msg 202 on link 45136	FSK 200/1000	(AB)
M42d	17-8	1220	Mon	6766	Russian diplo/intel. Msg 202 on link 45136	FSK 200/1000	(AB)
M42d	18-8	1200	Tue	10392	Russian diplo/intel. Msg 205 on link 45136	FSK 200/1000	(AB)
M42d	18-8	1210	Tue	8074	Russian diplo/intel. Msg 205 on link 45136	FSK 200/1000	(AB)
M42d	18-8	1220	Tue	6766	Russian diplo/intel. Msg 205 on link 45136	FSK 200/1000	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrlb
M42d	18-8	1400	Tue	18761	Russian diplo/intel. Msg 002 on link 32799	FSK 200/1000	(AB)
M42d	18-8	1410	Tue	16046	Russian diplo/intel. Msg 002 on link 32799	FSK 200/1000	(AB)
M42d	18-8	1420	Tue	14389	Russian diplo/intel. Msg 002 on link 32799	FSK 200/1000	(AB)
M42d	18-8	1650	Tue	17429	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
M42d	18-8	1700	Tue	15840	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
M42d	18-8	1710	Tue	13406	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
M42d	19-8	0610	Wed	14845	Russian diplo/intel. Msg 142 on link 32816	FSK 200/1000	(AB)
M42d	19-8	0700	Wed	11074	Russian diplo/intel. Msg 210 on link 45137	FSK 200/1000	(AB)
M42d	19-8	0710	Wed	9051	Russian diplo/intel. Msg 210 on link 45137	FSK 200/1000	(AB)
M42d	19-8	0720	Wed	7384	Russian diplo/intel. Msg 210 on link 45137	FSK 200/1000	(AB)
M42d	19-8	1200	Wed	10392	Russian diplo/intel. Msg 210 on link 45137	FSK 200/1000	(AB)
M42d	19-8	1210	Wed	8074	Russian diplo/intel. Msg 210 on link 45137	FSK 200/1000	(AB)
M42d	19-8	1220	Wed	6766	Russian diplo/intel. Msg 210 on link 45137	FSK 200/1000	(AB)
M42d	19-8	1230	Wed	17453	Russian diplo/intel. Msg 002 on link 53277	FSK 200/1000	(AB)
M42d	19-8	1240	Wed	15921	Russian diplo/intel. Msg 002 on link 53277	FSK 200/1000	(AB)
M42d	19-8	1250	Wed	13386	Russian diplo/intel. Msg 002 on link 53277	FSK 200/1000	(AB)
M42d	20-8	1330	Thu	13437	Russian diplo/intel. Msg 057 on link 49237	FSK 200/1000	(AB)
M42d	20-8	1340	Thu	11136	Russian diplo/intel. Msg 057 on link 49237	FSK 200/1000	(AB)
M42d	21-8	0700	Fri	11074	Russian diplo/intel. Msg 202 on link 45136	FSK 200/1000	(AB)
M42d	21-8	0710	Fri	9051	Russian diplo/intel. Msg 202 on link 45136	FSK 200/1000	(AB)
M42d	21-8	0720	Fri	7384	Russian diplo/intel. Msg 202 on link 45136	FSK 200/1000	(AB)
M42d	22-8	0800	Sat	17443	Russian diplo/intel. Msg 037 on link 45115	FSK 200/1000	(AB)
M42d	22-8	0810	Sat	15939	Russian diplo/intel. Msg 037 on link 45115	FSK 200/1000	(AB)
M42d	22-8	0820	Sat	13318	Russian diplo/intel. Msg 037 on link 45115	FSK 200/1000	(AB)
M42d	22-8	0900	Sat	16184	Russian diplo/intel. Msg 185 on link 45057	FSK 200/1000	(AB)
M42d	22-8	0910	Sat	14569	Russian diplo/intel. Msg 185 on link 45057	FSK 200/1000	(AB)
M42d	22-8	0920	Sat	12193	Russian diplo/intel. Msg 185 on link 45057	FSK 200/1000	(AB)
M42d	22-8	2100	Sat	16287	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
M42d	22-8	2110	Sat	14459	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
M42d	22-8	2120	Sat	12174	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
M42d	23-8	0800	Sun	17443	Russian diplo/intel. Msg 037 on link 45115	FSK 200/1000	(AB)
M42d	23-8	0810	Sun	15939	Russian diplo/intel. Msg 037 on link 45115	FSK 200/1000	(AB)
M42d	23-8	0820	Sun	13318	Russian diplo/intel. Msg 037 on link 45115	FSK 200/1000	(AB)
M42d	23-8	1530	Sun	17426	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
M42d	23-8	1540	Sun	15661	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
M42d	23-8	1550	Sun	13422	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
M42d	24-8	0700	Mon	11074	Russian diplo/intel. Msg 217 on link 45137	FSK 200/1000	(AB)
M42d	24-8	0710	Mon	9051	Russian diplo/intel. Msg 217 on link 45137	FSK 200/1000	(AB)
M42d	24-8	0720	Mon	7384	Russian diplo/intel. Msg 217 on link 45137	FSK 200/1000	(AB)
M42d	24-8	1200	Mon	10392	Russian diplo/intel. Msg 217 on link 45137	FSK 200/1000	(AB)
M42d	24-8	1210	Mon	8074	Russian diplo/intel. Msg 217 on link 45137	FSK 200/1000	(AB)
M42d	24-8	1220	Mon	6766	Russian diplo/intel. Msg 217 on link 45137	FSK 200/1000	(AB)
M42d	25-8	1410	Tue	16046	Russian diplo/intel. Msg 002 on link 32799	FSK 200/1000	(AB)
M42d	25-8	1420	Tue	14389	Russian diplo/intel. Msg 002 on link 32799	FSK 200/1000	(AB)
M42d	27-8	0820	Thu	13580	Russian diplo/intel. Msg 222 on link 16405	FSK 200/1000	(AB)
M42d	28-8	0700	Fri	11074	Russian diplo/intel. Msg 182 on link 45136	FSK 200/1000	(AB)
M42d	28-8	0710	Fri	9051	Russian diplo/intel. Msg 182 on link 45136	FSK 200/1000	(AB)
M42d	28-8	0720	Fri	7384	Russian diplo/intel. Msg 182 on link 45136	FSK 200/1000	(AB)
M42d	29-8	1120	Sat	13353	Russian diplo/intel. Msg nr 60 on link 36882	FSK 200/1000	(MPJ)
M42d	31-8	1200	Mon	10392	Russian diplo/intel. Msg 195 on link 45137	FSK 200/1000	(AB/MPJ)
M42d	31-8	1210	Mon	8074	Russian diplo/intel. Msg 195 on link 45137	FSK 200/1000	(AB)
M42d	31-8	1220	Mon	6766	Russian diplo/intel. Msg 195 on link 45137	FSK 200/1000	(AB)
M51a	11-8	0033	Tue	6825	SLGs offline crypto French MIL Intel	CW	(AB)
M51a	13-8	1715	Thu	6825	FAV22 i.p. VXRAD 25893 VXATG LGPRO DGURA MVNDJ SKAOI DJSOW JFEIS LPOID NCZMA XZAIU DWEAS XMCNS 96314 GATSW ... //3881 kHz	CW	(AB)
M51a	13-8	1715	Thu	3881	FAV22 i.p. VXRAD 25893 VXATG LGPRO DGURA MVNDJ SKAOI DJSOW JFEIS LPOID NCZMA XZAIU DWEAS XMCNS 96314 GATSW ... //6825 kHz	CW	(AB)
M51a	24-8	2205	Mon	6825	VVV VVV VVV DE FAV22 FAV22 FAV22 QLH 4/81/881/6/55 ...	CW	(JPL-Sib)
M89	1-8	0015	Sat	9131	V DKSL (x3) DE ALSK (x2) //10947	CW	(JPL)
M89	1-8	0015	Sat	10947	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
M89	1-8	0017	Sat	8073	i.p. 773 356 4T4 NN3 444 3DT TTA N34 TTA ND4 TT5 4DT 4D6 .4	CW	(JPL)
M89	1-8	0020	Sat	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	1-8	0020	Sat	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	1-8	0202	Sat	6825	CQ (x3) DE DP91 (x2) V HR NIL SK GB	CW	(JPL)
M89	1-8	0705	Sat	10947	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
M89	1-8	0705	Sat	9131	V DKSL (x3) DE ALSK (x2) //10947	CW	(JPL)
M89	1-8	0720	Sat	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	1-8	0720	Sat	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	1-8	1155	Sat	3777	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	1-8	2113	Sat	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	1-8	2114	Sat	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	1-8	2114	Sat	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	1-8	2117	Sat	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	1-8	2120	Sat	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	1-8	2120	Sat	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	2-8	0005	Sun	8073	V BNGC (x3) DE XSV85 (x2)	CW	(JPL)
M89	2-8	0030	Sun	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	2-8	1229	Sun	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	2-8	1235	Sun	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	2-8	1236	Sun	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	2-8	1237	Sun	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	2-8	1237	Sun	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	2-8	1936	Sun	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	2-8	1939	Sun	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	2-8	1940	Sun	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	2-8	1940	Sun	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	2-8	1941	Sun	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	2-8	1941	Sun	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	2-8	1942	Sun	5500	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	2-8	2055	Sun	5555	VVV BNGC (x3) DE XSV85 (x2) (Cont'd)	CW	(JPL)
M89	2-8	2120	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	2-8	2120	Sun	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	2-8	2233	Sun	4720	V WNF DE FXM	CW	(JPL)
M89	2-8	2241	Sun	5801	VV CQ CQ CQ DE UKNO UKNO (see N&O 215)	CW	(JPL)
M89	3-8	0947	Mon	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	3-8	0951	Mon	5588	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	3-8	0956	Mon	6825	CQ (x3) DE DP91 (x2) V	CW	(JPL)
M89	3-8	1015	Mon	7554	i.p. 773 35A U46 353 4AA 444 4D6 3DU TA3 (see N&O 215)	CW	(JPL)
M89	3-8	1020	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	3-8	1020	Mon	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	3-8	1027	Mon	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	3-8	1030	Mon	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	3-8	1030	Mon	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	3-8	1057	Mon	5588	i.p. III = AN7D 6T6D U5AT NAU6 7ADA U35U D75T UDN6 TT6A TT34 III 3UA6	CW	(JPL)
M89	3-8	1103	Mon	8060	V M8JF (x3) DE RIS9 (x2) //6793 and 3777	CW	(JPL)
M89	3-8	1103	Mon	3777	V M8JF (x3) DE RIS9 (x2) //8060 and 6793	CW	(JPL)
M89	3-8	1103	Mon	6793	V M8JF (x3) DE RIS9 (x2) //8060 and 3777	CW	(JPL)
M89	3-8	1106	Mon	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	3-8	1107	Mon	5801	i.p. VVV NRKW K. VVV AIXW K (see N&O 215)	CW	(JPL)
M89	4-8	2013	Tue	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	4-8	2016	Tue	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	4-8	2018	Tue	3797	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	4-8	2018	Tue	4532	V M8JF (x3) DE RIS9 (x2) //3797	CW	(JPL)
M89	4-8	2019	Tue	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	4-8	2019	Tue	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	4-8	2020	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	4-8	2020	Tue	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	4-8	2030	Tue	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K (2034z)	CW	(JPL)
M89	5-8	0010	Wed	8073	773 T3U -XSV85 0001z sked- (see N&O 215)	CW	(JPL)
M89	5-8	0020	Wed	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	5-8	0020	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K	CW	(JPL)
M89	5-8	0026	Wed	9131	V DKSL (x3) DE ALSK (x2) //10947	CW	(JPL)
M89	5-8	0026	Wed	10947	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	5-8	0030	Wed	6793	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	5-8	1002	Wed	6825	CQ (x3) DE DP91 (x2) V	CW	(JPL)
M89	5-8	1008	Wed	5588	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5-8	1009	Wed	10947	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
M89	5-8	1009	Wed	9131	V DKSL (x3) DE ALSK (x2) //10947	CW	(JPL)
M89	5-8	1012	Wed	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	5-8	1012	Wed	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	5-8	1016	Wed	6666	VV BBSQ DE J4PR K R QSL ? K (see N&O 215)	CW	(JPL)
M89	5-8	1607	Wed	3330	i.p. 54TN DT4N 53AU 3A7U 7AU3 5ND3 III NN..	CW	(JPL)
M89	5-8	1612	Wed	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	5-8	1613	Wed	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	5-8	1616	Wed	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	5-8	1620	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	5-8	1620	Wed	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	5-8	1630	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	5-8	1640	Wed	3330	i.p. FF CQ 63 EEEEE 05.8 TO 3782 .358 UGT COMM =	CW	(JPL)
M89	5-8	1720	Wed	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	5-8	1720	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	5-8	1729	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	5-8	1739	Wed	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	5-8	1954	Wed	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5-8	1956	Wed	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	5-8	1957	Wed	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	5-8	1957	Wed	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	5-8	1959	Wed	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	5-8	2029	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	5-8	2200	Wed	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5-8	2201	Wed	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	5-8	2206	Wed	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	5-8	2220	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	5-8	2220	Wed	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	5-8	2229	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	6-8	0009	Thu	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	6-8	0204	Thu	6825	CQ (x3) DE DP91 (x2) V	CW	(JPL)
M89	6-8	0220	Thu	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	6-8	0220	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	6-8	0952	Thu	5588	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	6-8	0955	Thu	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	6-8	0955	Thu	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	6-8	1020	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	6-8	1020	Thu	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	6-8	1153	Thu	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	6-8	1155	Thu	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	6-8	1519	Thu	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	6-8	1520	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	6-8	1520	Thu	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	6-8	1522	Thu	7602	V DKG6 (x3) DE 3A7D (x2) //N/H	CW	(JPL)
M89	6-8	1524	Thu	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	6-8	1528	Thu	3821	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	6-8	1529	Thu	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	6-8	1629	Thu	4720	VVV WBN (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	6-8	1638	Thu	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	6-8	1640	Thu	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	6-8	1640	Thu	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	6-8	1641	Thu	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	6-8	1642	Thu	3821	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	6-8	1934	Thu	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	6-8	1953	Thu	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	6-8	1953	Thu	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	6-8	1954	Thu	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	6-8	2129	Thu	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	6-8	2135	Thu	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	6-8	2136	Thu	3821	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	6-8	2137	Thu	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	7-8	0120	Fri	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	7-8	0120	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	7-8	0131	Fri	7777	i.p. AR R QSL 1010 K. R R HR 1001 K. R R HR WK ..2 K. NIL SK GB R SK	CW	(JPL)
M89	7-8	0136	Fri	8888	VVV CQ (x3) DE 3SY (x2) (see N&O 215)	CW	(JPL)
M89	7-8	0158	Fri	6825	CQ (x3) DE DP91 (x2) V	CW	(JPL)
M89	7-8	1257	Fri	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	7-8	1259	Fri	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	7-8	1300	Fri	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	7-8	1300	Fri	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	7-8	1301	Fri	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	7-8	1314	Fri	5555	i.p. 7G NR 002/CCK CK 195 39 0805 1400 RMKS 5848 TO 5612 K (see N&O 215)	CW	(JPL)
M89	7-8	1314	Fri	5555	i.p. 4DA3 5D 05 05 05 HR KCB GA K (see N&O 215)	CW	(JPL)
M89	7-8	1320	Fri	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	7-8	1320	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	7-8	1329	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	7-8	1420	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	7-8	1420	Fri	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	7-8	1429	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	7-8	1440	Fri	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	7-8	1441	Fri	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	7-8	1441	Fri	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	7-8	1442	Fri	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	7-8	1442	Fri	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	7-8	1444	Fri	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	7-8	1453	Fri	3271	i.p. DND4 DU3A 5457 53TU 5.D7 AR K. R R USB USB K. HR WK NR .8. 8. USB	CW	(JPL)
M89	7-8	1529	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	7-8	1620	Fri	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	7-8	1620	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	7-8	1626	Fri	6666	VV 2GHY 2GHY 2GHY DE RBR7 RBR7 (see N&O 215)	CW	(JPL)
M89	7-8	1629	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	7-8	2009	Fri	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	7-8	2020	Fri	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	7-8	2020	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	7-8	2029	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	7-8	2120	Fri	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	7-8	2120	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	7-8	2121	Fri	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	7-8	2121	Fri	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	7-8	2129	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	7-8	2229	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	8-8	0858	Sat	10947	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
M89	8-8	0858	Sat	9131	V DKSL (x3) DE ALSK (x2) //10847	CW	(JPL)
M89	8-8	0920	Sat	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	8-8	0920	Sat	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	8-8	1002	Sat	6825	CQ (x3) DE DP91 (x2) V PSE ALL ...	CW	(JPL)
M89	8-8	1700	Sat	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	8-8	1710	Sat	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	8-8	1710	Sat	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	8-8	1711	Sat	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	8-8	1712	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	8-8	1720	Sat	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	8-8	1720	Sat	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	8-8	1720	Sat	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	8-8	2020	Sat	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	8-8	2020	Sat	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	8-8	2025	Sat	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	8-8	2026	Sat	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	8-8	2027	Sat	3777	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	8-8	2028	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	8-8	2029	Sat	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	8-8	2129	Sat	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	9-8	0647	Sun	10947	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	9-8	1216	Sun	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	9-8	1219	Sun	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	9-8	1220	Sun	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	9-8	1220	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	9-8	1226	Sun	3330	i.p. 7AU3 5ND3 5NT4 5TAN 6335 A7DA III DN35 4N67 AN64 6UN4 (Cont)	CW	(JPL)
M89	9-8	1236	Sun	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	9-8	1320	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	9-8	1320	Sun	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	9-8	1326	Sun	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	9-8	1327	Sun	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	9-8	1329	Sun	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K (switches to this freq at 1329z)	CW	(JPL)
M89	9-8	1639	Sun	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	9-8	1640	Sun	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	9-8	1642	Sun	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	9-8	1643	Sun	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	9-8	1645	Sun	5500	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	9-8	1720	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	9-8	1720	Sun	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	9-8	1725	Sun	5500	i.p. 3947/3309/9786/3474/4149 (see N&O 215)	CW	(JPL)
M89	9-8	1729	Sun	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	9-8	1820	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	9-8	1820	Sun	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	9-8	1825	Sun	5500	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	9-8	1826	Sun	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	9-8	1827	Sun	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	9-8	1828	Sun	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	9-8	1829	Sun	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	9-8	1829	Sun	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	10-8	1134	Mon	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	10-8	1154	Mon	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	10-8	1156	Mon	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	10-8	1156	Mon	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	10-8	1158	Mon	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	10-8	1158	Mon	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	10-8	1349	Mon	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	10-8	1350	Mon	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	10-8	1350	Mon	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	10-8	1351	Mon	5500	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	10-8	1352	Mon	10180	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
M89	10-8	1352	Mon	5801	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
M89	10-8	1357	Mon	6688	4U56 U4AT NN4D 3D73 3A3A 6NAU UDN7 N5T3 III III = TU36 7D54 7T33 7NUA (Cont'd)	CW	(JPL)
M89	10-8	1515	Mon	5555	MSG TU XXX EDE YAOMIN AR see N&O 215)	CW	(JPL)
M89	10-8	1529	Mon	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	10-8	1706	Mon	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	10-8	1712	Mon	3792	VVV BM2 DE 7MT QRU 1168 1168 SK SK	CW	(JPL)
M89	10-8	1720	Mon	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	10-8	1720	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	10-8	1721	Mon	5500	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	10-8	1729	Mon	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	10-8	1929	Mon	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	10-8	2129	Mon	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	10-8	2137	Mon	5500	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	11-8	0006	Tue	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	11-8	0020	Tue	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	11-8	0020	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	11-8	0022	Tue	10947	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
M89	11-8	0022	Tue	9131	V DKSL (x3) DE ALSK (x2) //10947	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	11-8	0025	Tue	8110	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	11-8	0027	Tue	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	11-8	0206	Tue	6825	CQ (x3) DE DP91 (x2) V PSE ALL TT RR S DP7991 .. DP6791 QSA 3 K GB	CW	(JPL)
M89	11-8	0749	Tue	10947	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	11-8	0752	Tue	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	11-8	0754	Tue	7777	7G NR 206 CK 199 55 08 11 1553 RMKS 0682 TO 0687 R K (see N&O 215)	CW	(JPL)
M89	11-8	0820	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	11-8	0820	Tue	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	11-8	1127	Tue	5588	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	11-8	1128	Tue	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	11-8	1131	Tue	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	11-8	1134	Tue	8110	RIG TTS MODE SCAN FUNCA BT B SPLIT MW ICOM ICT 75A F TRANSTVER POWER (see N&O 215)	CW	(JPL)
M89	11-8	1144	Tue	8073	AR MSG AGN R NR 0674 CK 144 35 0811 1546 = TAA 3U6 3AN 3U7 TAU ... AR AR	CW	(JPL)
M89	11-8	1157	Tue	5500	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	11-8	1158	Tue	5588	III N7N6 MSG NR 044 CK 301 44 0811 1930 =	CW	(JPL)
M89	11-8	1220	Tue	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	11-8	1220	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	11-8	1327	Tue	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	11-8	1328	Tue	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	11-8	1328	Tue	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	11-8	1329	Tue	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	11-8	1329	Tue	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	11-8	1655	Tue	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	11-8	1656	Tue	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	11-8	1656	Tue	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	11-8	1657	Tue	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	11-8	1657	Tue	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	11-8	1658	Tue	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	11-8	1720	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	11-8	1720	Tue	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	11-8	1729	Tue	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	11-8	2020	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	11-8	2020	Tue	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	11-8	2029	Tue	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	11-8	2129	Tue	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	11-8	2220	Tue	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	11-8	2220	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	11-8	2229	Tue	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	11-8	2335	Tue	6421	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	11-8	2337	Tue	6421	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
M89	11-8	2337	Tue	9131	V DKSL (x3) DE ALSK (x2) //6421	CW	(JPL)
M89	12-8	0006	Wed	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	12-8	0020	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	12-8	0020	Wed	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	12-8	0025	Wed	6421	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
M89	12-8	0025	Wed	9131	V DKSL (x3) DE ALSK (x2) //6421	CW	(JPL)
M89	12-8	0043	Wed	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	12-8	0203	Wed	6825	CQ (x3) DE DP91 (x2) V HR NIL SK GB	CW	(JPL)
M89	12-8	0939	Wed	9131	V DKSL (x3) DE ALSK (x2) //6421	CW	(JPL)
M89	12-8	0939	Wed	6421	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
M89	12-8	0941	Wed	5588	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	12-8	0944	Wed	8888	i.p. 05 05 05 = SWSL M = 4UD5 U43D 735T TAN3 67UD N5A6 A6N3 DUTN 64T7 457A UD6A NDT7 7D63 A4NT	CW	(JPL)
M89	12-8	0951	Wed	6688	i.p. NR 188/CCK CK 199 37 0812 1745 RMKS 48.6 TO 574.. 57N.7UND UA47 567N AD7N D57U	CW	(JPL)
M89	12-8	0956	Wed	6825	CQ (x3) DE DP91 (x2) V HR NIL SK GB	CW	(JPL)
M89	12-8	1020	Wed	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	12-8	1020	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	12-8	1329	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	12-8	1334	Wed	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	12-8	1335	Wed	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	12-8	1335	Wed	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	12-8	1337	Wed	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	12-8	1337	Wed	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	12-8	1341	Wed	10180	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
M89	12-8	1341	Wed	5801	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
M89	12-8	1729	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	12-8	1829	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	12-8	1835	Wed	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	12-8	1836	Wed	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	12-8	1836	Wed	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	12-8	1837	Wed	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	12-8	1837	Wed	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	12-8	1838	Wed	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	12-8	1838	Wed	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	12-8	1920	Wed	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	12-8	1920	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	12-8	1929	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	13-8	0620	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	13-8	0620	Thu	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	13-8	1134	Thu	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	13-8	1150	Thu	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	13-8	1152	Thu	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	13-8	1152	Thu	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	13-8	1154	Thu	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	13-8	1157	Thu	8747	VVV (x2) 4GN (X3) DE (x2) QJ7 (x3)	CW	(JPL)
M89	13-8	1429	Thu	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	13-8	1436	Thu	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	13-8	1437	Thu	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	13-8	1437	Thu	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	13-8	1438	Thu	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	13-8	1438	Thu	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	13-8	1700	Thu	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	13-8	1808	Thu	8888	7G NR 2001 CK 99 32 0814 0200 RMKS 1881 TO 1887 K (see N&O 215)	CW	(JPL)
M89	13-8	1820	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	13-8	1820	Thu	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	13-8	1829	Thu	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	13-8	2216	Thu	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	13-8	2220	Thu	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	13-8	2220	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	13-8	2229	Thu	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	14-8	1710	Fri	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	14-8	1712	Fri	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	14-8	1712	Fri	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	14-8	1716	Fri	3777	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	14-8	2106	Fri	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	14-8	2107	Fri	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	14-8	2108	Fri	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	14-8	2108	Fri	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	14-8	2129	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	14-8	2308	Fri	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	14-8	2320	Fri	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	14-8	2320	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	15-8	1649	Sat	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	15-8	1650	Sat	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	15-8	1652	Sat	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	15-8	1652	Sat	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	15-8	1654	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	15-8	1813	Sat	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	15-8	1814	Sat	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	15-8	1815	Sat	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	15-8	1815	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	15-8	1815	Sat	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	15-8	1820	Sat	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	15-8	1820	Sat	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	15-8	1829	Sat	4720	VVV WNF (x3) DE FXM (x2)QSA ? QSV K	CW	(JPL)
M89	16-8	0134	Sun	6421	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	16-8	0137	Sun	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	16-8	0636	Sun	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	16-8	1604	Sun	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	16-8	1604	Sun	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	16-8	1608	Sun	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	16-8	1608	Sun	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	16-8	1609	Sun	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	16-8	1609	Sun	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	16-8	1620	Sun	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	16-8	1620	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	16-8	1629	Sun	4720	VVV WNF (x3) DE FXM (x2)QSA ? QSV K	CW	(JPL)
M89	16-8	1631	Sun	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	16-8	1859	Sun	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	16-8	1900	Sun	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	16-8	1900	Sun	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	16-8	1901	Sun	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	16-8	1901	Sun	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	16-8	1902	Sun	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	16-8	1902	Sun	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	16-8	1920	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	16-8	1920	Sun	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	16-8	1929	Sun	4720	VVV WNF (x3) DE FXM (x2)QSA ? QSV K	CW	(JPL)
M89	17-8	0020	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	17-8	0020	Mon	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	17-8	0026	Mon	9131	V DKSL (x3) DE ALSK (x2) //10947	CW	(JPL)
M89	17-8	0026	Mon	10947	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
M89	17-8	0028	Mon	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	17-8	0028	Mon	8060	i.p. UGT COMM = 348/5332/5686/08/17/083../.86/A/61/.1 AR	CW	(JPL)
M89	17-8	0037	Mon	8110	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	17-8	0919	Mon	10947	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
M89	17-8	0919	Mon	9131	V DKSL (x3) DE ALSK (x2) //10947	CW	(JPL)
M89	17-8	0920	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	17-8	0920	Mon	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	17-8	0925	Mon	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	17-8	0926	Mon	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	17-8	0928	Mon	7582	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	17-8	1724	Mon	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	17-8	1727	Mon	3777	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	17-8	1730	Mon	3821	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	17-8	1735	Mon	3330	i.p. 98.78./34.4/.300/117 NR/05..98. 88.8/34.4/0300/117NR/0.0.9 AR	CW	(JPL)
M89	17-8	1740	Mon	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	17-8	1740	Mon	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	17-8	1742	Mon	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	17-8	1742	Mon	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	17-8	1743	Mon	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	17-8	1745	Mon	4225	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	17-8	2124	Mon	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	17-8	2125	Mon	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	17-8	2127	Mon	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	17-8	2127	Mon	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	17-8	2128	Mon	3821	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	17-8	2128	Mon	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	18-8	1120	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	18-8	1122	Tue	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	18-8	1122	Tue	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	18-8	1124	Tue	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	18-8	1125	Tue	4225	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	18-8	1128	Tue	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	18-8	1130	Tue	7777	i.p. RMKS 3436 TO 3483 AR K. R GA R 1W = 4TDU USAT N763 4NAT	CW	(JPL)
M89	18-8	1138	Tue	8073	V BNGC (x3) DE XSV85 (x2) (see N&o 215)	CW	(JPL)
M89	18-8	1447	Tue	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	18-8	1449	Tue	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	18-8	1450	Tue	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	18-8	1450	Tue	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	18-8	1451	Tue	4225	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	18-8	1452	Tue	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	18-8	1452	Tue	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	18-8	1500	Tue	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	18-8	1502	Tue	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	18-8	1504	Tue	3789	i.p. T43N DT3. D55T 76UN DU36 III = (see N&O 215)	CW	(JPL)
M89	18-8	1729	Tue	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	18-8	1736	Tue	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	18-8	1738	Tue	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	18-8	1738	Tue	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	18-8	1739	Tue	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	18-8	1739	Tue	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	18-8	1740	Tue	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	18-8	1740	Tue	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	18-8	2014	Tue	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	18-8	2016	Tue	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	18-8	2016	Tue	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	18-8	2029	Tue	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	19-8	0910	Wed	10947	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
M89	19-8	0910	Wed	9131	V DKSL (x3) DE ALSK (x2) //10947	CW	(JPL)
M89	19-8	0914	Wed	6793	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	19-8	0916	Wed	5588	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	19-8	0920	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	19-8	0920	Wed	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	19-8	1004	Wed	6825	CQ (x3) DE DP91 (x2) V	CW	(JPL)
M89	19-8	1408	Wed	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	19-8	1410	Wed	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	19-8	1410	Wed	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	19-8	1412	Wed	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	19-8	1412	Wed	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	19-8	1414	Wed	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	19-8	1414	Wed	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	19-8	1420	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	19-8	1420	Wed	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	19-8	1429	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	19-8	1729	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	19-8	1744	Wed	3330	COMM AAES BT 98178/348./0300/11.NR/0598 AR = 98178/3484/0300/117NR/0598 AR	CW	(JPL)
M89	19-8	1748	Wed	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	19-8	1748	Wed	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	19-8	1749	Wed	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	19-8	1749	Wed	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	19-8	1751	Wed	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	19-8	1751	Wed	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	19-8	1820	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	19-8	1820	Wed	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	19-8	1829	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	19-8	2029	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	19-8	2037	Wed	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	19-8	2039	Wed	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	19-8	2039	Wed	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	19-8	2040	Wed	3821	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
M89	19-8	2040	Wed	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	20-8	1238	Thu	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	20-8	1239	Thu	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	20-8	1240	Thu	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	20-8	1240	Thu	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	20-8	1350	Thu	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	20-8	1351	Thu	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	20-8	1352	Thu	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	20-8	1352	Thu	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	20-8	1357	Thu	4444	DLR9 DE GHQ (see N&O 215)	CW	(JPL)
M89	20-8	1420	Thu	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	20-8	1420	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	20-8	1429	Thu	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	20-8	1620	Thu	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	20-8	1620	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	20-8	1957	Thu	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	20-8	1958	Thu	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	20-8	1959	Thu	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	20-8	1959	Thu	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	21-8	0013	Fri	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	21-8	0052	Fri	8073	XSV85 voice traffic	CW	(JPL)
M89	21-8	0054	Fri	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	21-8	0904	Fri	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	21-8	0907	Fri	6793	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	21-8	0909	Fri	5588	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	21-8	0920	Fri	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	21-8	0920	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	21-8	1130	Fri	8073	XSV85 data	CW	(JPL)
M89	21-8	1143	Fri	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 2015)	CW	(JPL)
M89	21-8	1347	Fri	3330	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd)	CW	(JPL)
M89	21-8	1349	Fri	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	21-8	1349	Fri	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	21-8	1350	Fri	5644	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
M89	21-8	1352	Fri	10180	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
M89	21-8	1352	Fri	5801	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
M89	21-8	1355	Fri	4444	i.p. AUTA 75AT 7ATU 6N3U A574 7UT4 (see N&O 215)	CW	(JPL)
M89	21-8	1420	Fri	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	21-8	1420	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	21-8	1604	Fri	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	21-8	1604	Fri	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	21-8	1607	Fri	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	21-8	1620	Fri	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K	CW	(JPL)
M89	21-8	1621	Fri	3330	i.p. NR 85 CK 301 44 0822 0000 = 6557 3N66 754U 64AD (Cont'd)	CW	(JPL)
M89	21-8	2029	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	21-8	2032	Fri	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	21-8	2033	Fri	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	21-8	2033	Fri	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	21-8	2034	Fri	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	21-8	2034	Fri	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	21-8	2036	Fri	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	22-8	1126	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	22-8	1127	Sat	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	22-8	1128	Sat	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	22-8	1130	Sat	3777	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	22-8	1132	Sat	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	22-8	1420	Sat	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	22-8	1420	Sat	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	22-8	1425	Sat	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	22-8	1426	Sat	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	22-8	1426	Sat	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	22-8	1428	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	22-8	1429	Sat	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	22-8	1433	Sat	6775	V SD2. DE CV6K HR SVC GA HR SVC GA = 6474/14/88/COMM/6423 AR	CW	(JPL)
M89	22-8	1446	Sat	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	22-8	1448	Sat	3673	VV LQH6 LQH6 DE CXD9 K (see N&O 215)	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	22-8	1627	Sat	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	22-8	1629	Sat	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	22-8	1629	Sat	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	22-8	1629	Sat	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	22-8	1631	Sat	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	22-8	1631	Sat	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	22-8	1634	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	22-8	1941	Sat	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	22-8	1941	Sat	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	22-8	1944	Sat	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	22-8	1944	Sat	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	22-8	1945	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	22-8	2155	Sat	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	22-8	2156	Sat	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	22-8	2158	Sat	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	22-8	2158	Sat	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	22-8	2159	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	22-8	2220	Sat	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	22-8	2220	Sat	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	22-8	2229	Sat	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	23-8	0120	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	23-8	0120	Sun	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	23-8	0850	Sun	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	23-8	0920	Sun	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	23-8	0920	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	23-8	0954	Sun	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	23-8	1000	Sun	6825	CQ (x3) DE DP91 (x2) V PSE ALL HR FREQ WK DE DP7591 QSA 3 QSA ? K	CW	(JPL)
M89	23-8	1130	Sun	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	23-8	1436	Sun	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	23-8	1438	Sun	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	23-8	1440	Sun	3777	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	23-8	1445	Sun	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	23-8	1445	Sun	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	23-8	1446	Sun	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	23-8	1446	Sun	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	23-8	1658	Sun	3330	III D567 V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	23-8	1700	Sun	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	23-8	1700	Sun	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	23-8	1701	Sun	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	23-8	1702	Sun	5500	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	23-8	1702	Sun	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	23-8	2110	Sun	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	23-8	2112	Sun	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	23-8	2113	Sun	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	23-8	2113	Sun	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	23-8	2116	Sun	4225	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	23-8	2120	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	23-8	2120	Sun	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	24-8	0958	Mon	6825	CQ (x3) DE DP91 (x2) V	CW	(JPL)
M89	24-8	1010	Mon	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	24-8	1011	Mon	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	24-8	1011	Mon	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	24-8	1013	Mon	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	24-8	1020	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	24-8	1020	Mon	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	24-8	1146	Mon	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	24-8	1255	Mon	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	24-8	1257	Mon	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	24-8	1257	Mon	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	24-8	1257	Mon	5500	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	24-8	1258	Mon	5801	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
M89	24-8	1258	Mon	10180	V DKG6 DE 3A7D C 2/..CL/2.0/Z/4..5/47.9 AR SVC GA/1002100 RMKS ...	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
					//5801		
M89	24-8	1309	Mon	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	24-8	1313	Mon	5555	i.p. 7G NR 48/CK CK 79 32 0824 1940 RMKS R464 TO (see N&O 215)	CW	(JPL)
M89	24-8	1320	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	24-8	1320	Mon	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	24-8	1616	Mon	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(AB-HK)
M89	24-8	1616	Mon	4860	VVV VVV VVV Q2M Q2M Q2M DE NYZ NYZ QSA ? K //6840	CW	(AB-HK)
M89	24-8	1616	Mon	3642	V DKG6 DKG6 DKG6 DE 3A7D 3A7D	CW	(AB-HK)
M89	24-8	1616	Mon	3330	V MW3D MW3D MW3D DE 2SLC 2SLC	CW	(AB-HK)
M89	24-8	1616	Mon	4532	V M8JF M8JF M8JF DE RIS9 RIS9	CW	(AB-HK)
M89	24-8	1616	Mon	6840	VVV VVV VVV Q2M Q2M Q2M DE NYZ NYZ QSA ? K //4860	CW	(AB-HK)
M89	24-8	1616	Mon	5644	V DKSL DKSL DKSL DE ALSK ALSK	CW	(AB-HK)
M89	24-8	1616	Mon	3777	V M8JF M8JF M8JF DE RIS9 RIS9	CW	(AB-HK)
M89	24-8	1616	Mon	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	24-8	1616	Mon	5500	V 7NPE 7NPE 7NPE DE QV5B QV5B	CW	(AB-HK)
M89	24-8	1617	Mon	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	24-8	1618	Mon	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	24-8	1618	Mon	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	24-8	1619	Mon	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	24-8	1620	Mon	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	24-8	1620	Mon	5500	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	24-8	1620	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	24-8	1629	Mon	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	24-8	1845	Mon	3880	i.p. ND4T NA7T 6576 7AD3 TU64 AT36 (see N&O 215)	CW	(JPL)
M89	24-8	1920	Mon	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	24-8	1920	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	24-8	2152	Mon	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	24-8	2153	Mon	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	24-8	2154	Mon	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	24-8	2155	Mon	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	24-8	2218	Mon	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	24-8	2220	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	24-8	2220	Mon	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	24-8	2229	Mon	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	25-8	0011	Tue	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	25-8	0020	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	25-8	0020	Tue	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	25-8	0025	Tue	6421	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	25-8	0028	Tue	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	25-8	0030	Tue	8888	i.p. MSG NR EEEE A 7NPE QV5B V 7NPE = QSY TO NR 07 K	CW	(JPL)
M89	25-8	0036	Tue	7582	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	25-8	0750	Tue	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	25-8	0755	Tue	8110	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	25-8	1611	Tue	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	25-8	1620	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	25-8	1620	Tue	3777	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	25-8	1620	Tue	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	25-8	1625	Tue	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	25-8	1625	Tue	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	25-8	1626	Tue	3777	V M8JF (x3) DE RIS9 (x2) (4532	CW	(JPL)
M89	25-8	1626	Tue	4532	V M8JF (x3) DE RIS9 (x2) (3777	CW	(JPL)
M89	25-8	1627	Tue	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	25-8	1629	Tue	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	25-8	2019	Tue	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	25-8	2020	Tue	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	25-8	2020	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	25-8	2022	Tue	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	25-8	2022	Tue	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	25-8	2023	Tue	3777	V M8JF (x3) DE RIS9 (x2) (4532	CW	(JPL)
M89	25-8	2023	Tue	4532	V M8JF (x3) DE RIS9 (x2) (3777	CW	(JPL)
M89	25-8	2024	Tue	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	25-8	2029	Tue	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	26-8	0007	Wed	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	26-8	0201	Wed	6825	CQ (x3) DE DP91 (x2) V	CW	(JPL)
M89	26-8	1029	Wed	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	26-8	1033	Wed	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	26-8	1036	Wed	5588	i.p. 7U7U 7N3N TUT6 D5D6 (see N&O 215)	CW	(JPL)
M89	26-8	1058	Wed	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	26-8	1058	Wed	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	26-8	1100	Wed	7777	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	26-8	1130	Wed	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	26-8	1156	Wed	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	26-8	1157	Wed	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	26-8	1157	Wed	4532	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	26-8	1557	Wed	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	26-8	1602	Wed	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	26-8	1603	Wed	3777	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	26-8	1654	Wed	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	26-8	1654	Wed	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	26-8	1654	Wed	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	26-8	1656	Wed	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	26-8	1656	Wed	4532	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	26-8	1701	Wed	5555	i.p. /CCK CK 199 32 0826 2210 RMKS = 5680 TO 5... /5376/5646/5616/5366/5335/5339/5681/	CW	(JPL)
M89	26-8	1720	Wed	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	26-8	1720	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	26-8	1729	Wed	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	26-8	2037	Wed	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	26-8	2038	Wed	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	26-8	2039	Wed	4532	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	26-8	2039	Wed	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	26-8	2253	Wed	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	26-8	2253	Wed	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	27-8	0847	Thu	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	27-8	0850	Thu	5588	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	27-8	0853	Thu	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	27-8	0853	Thu	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	27-8	1130	Thu	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	27-8	1315	Thu	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	27-8	1316	Thu	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	27-8	1316	Thu	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	27-8	1318	Thu	5801	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
M89	27-8	1318	Thu	10180	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
M89	27-8	1319	Thu	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	27-8	1320	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	27-8	1320	Thu	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	27-8	1329	Thu	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	27-8	1704	Thu	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	27-8	1705	Thu	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	27-8	1706	Thu	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	27-8	1820	Thu	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K	CW	(JPL)
M89	27-8	1822	Thu	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	27-8	1822	Thu	7602	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	27-8	1823	Thu	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	27-8	1823	Thu	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	27-8	1829	Thu	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	28-8	1020	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	28-8	1020	Fri	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	28-8	1027	Fri	5588	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	28-8	1029	Fri	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	28-8	1029	Fri	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	28-8	1032	Fri	6421	V DKSL (x3) DE ALSK (x2) //N/H	CW	(JPL)
M89	28-8	1033	Fri	8888	i.p. 7D3G DE PW1R K (see N&O 215)	CW	(JPL)
M89	28-8	1047	Fri	5588	i.p. III TT34 UTDN 7546 III ..T5 AR (1049z) (Return to R/S - 1054z)	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	28-8	1055	Fri	8888	i.p. ... 28 0640 RMKS 73.16 TO 3488 TO .316 K K (see N&O 215)	CW	(JPL)
M89	28-8	1135	Fri	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	28-8	1200	Fri	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	28-8	1201	Fri	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	28-8	1201	Fri	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	28-8	1203	Fri	5644	V DKSL (x3) DE ALSK (x2) //N/H	CW	(JPL)
M89	28-8	1205	Fri	5801	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
M89	28-8	1205	Fri	10180	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
M89	28-8	1414	Fri	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	28-8	1417	Fri	5801	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
M89	28-8	1417	Fri	10180	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
M89	28-8	1418	Fri	5644	V DKSL (x3) DE ALSK (x2) //N/H	CW	(JPL)
M89	28-8	1419	Fri	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	28-8	1419	Fri	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	28-8	1420	Fri	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	28-8	1420	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	28-8	1429	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	28-8	1620	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	28-8	1620	Fri	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	28-8	1622	Fri	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	28-8	1623	Fri	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	28-8	1623	Fri	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	28-8	1625	Fri	5644	V DKSL (x3) DE ALSK (x2) //N/H	CW	(JPL)
M89	28-8	1629	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	28-8	1829	Fri	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	29-8	0145	Sat	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	29-8	0148	Sat	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	29-8	0202	Sat	6825	CQ (x3) DE DP91 (x2) V DP7991 QSA 2 QSA ? K NIL SK DE DP7591 QSA 2 ...	CW	(JPL)
M89	29-8	0910	Sat	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	29-8	0910	Sat	8060	i.p. 3N3U NAAT NNNN TTU3 73N6 7AA3 UAN7 (see N&O 215)	CW	(JPL)
M89	29-8	0910	Sat	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	29-8	0920	Sat	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	29-8	0920	Sat	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	29-8	0925	Sat	5588	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	29-8	0958	Sat	6825	CQ (x3) DE DP91 (x2) V	CW	(JPL)
M89	29-8	1347	Sat	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	29-8	1347	Sat	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	29-8	1349	Sat	3642	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
M89	29-8	1349	Sat	7602	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
M89	29-8	1351	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	29-8	1700	Sat	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	29-8	2051	Sat	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	29-8	2053	Sat	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	29-8	2054	Sat	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	29-8	2054	Sat	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	29-8	2055	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	29-8	2255	Sat	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	29-8	2255	Sat	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	29-8	2258	Sat	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	29-8	2308	Sat	3642	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	30-8	0005	Sun	8073	V BNGC (x3) DE XSV85 (x2) (see N&O 215)	CW	(JPL)
M89	30-8	0031	Sun	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	30-8	0032	Sun	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	30-8	0159	Sun	6825	CQ (x3) DE DP91 (x2) V NIL SK GB	CW	(JPL)
M89	30-8	0802	Sun	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	30-8	0806	Sun	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	30-8	0806	Sun	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	30-8	0920	Sun	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	30-8	0920	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
M89	30-8	0923	Sun	5588	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	30-8	0925	Sun	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	30-8	0926	Sun	8889	i.p. MSG GA PSE CY NR 0723 CK 117 35 40 .9 III (see N&O 215)	CW	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89	30-8	1207	Sun	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	30-8	1208	Sun	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	30-8	1208	Sun	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	30-8	1210	Sun	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	30-8	1211	Sun	5801	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
M89	30-8	1211	Sun	10180	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
M89	30-8	1429	Sun	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89	30-8	1431	Sun	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	30-8	1432	Sun	5801	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	30-8	1433	Sun	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	30-8	1433	Sun	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	30-8	1437	Sun	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	30-8	2051	Sun	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	30-8	2052	Sun	3777	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
M89	30-8	2052	Sun	4532	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
M89	30-8	2054	Sun	5500	V 7NPE (x3) DE DEQV5B (x2) small error	CW	(JPL)
M89	30-8	2056	Sun	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	30-8	2251	Sun	5500	V 7NPE (x3) DE DEQV5B (x2) small error	CW	(JPL)
M89	30-8	2253	Sun	8060	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
M89	30-8	2253	Sun	6793	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
M89	30-8	2258	Sun	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	31-8	0650	Mon	9131	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	31-8	0653	Mon	8110	V 7NPE (x3) DE DEQV5B (x2)	CW	(JPL)
M89	31-8	0655	Mon	8060	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	31-8	0957	Mon	6825	CQ (x3) DE DP91 (x2) V	CW	(JPL)
M89	31-8	1257	Mon	3330	CQ 63 RMKS 9358 TO 3648 UGT COMM SVC = 78/3648/2130/23.NR/9358 981Z ZK EEEE /3648/2130/23.NR/9358 AR	CW	(JPL)
M89	31-8	1304	Mon	4532	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
M89	31-8	1306	Mon	5801	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
M89	31-8	1306	Mon	10180	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
M89	31-8	1308	Mon	5644	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
M89	31-8	1316	Mon	6636	i.p. 7ATA N363 T6U6 T.65 N6A4 TUUU III N363 T6..N N.UU N77A T565 NNNU TU3A AR	CW	(JPL)
M89	31-8	1446	Mon	3283	(MSG NR 0010 CK 99 30 0.31 2245 RMKS 0084 TO 0464 K GA BT 4ND7 66.. AR K	CW	(JPL)
M89	31-8	1456	Mon	3330	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	31-8	1502	Mon	3642	VVV HR SVC NR 5383 7222 81015 333..8393714063	CW	(JPL)
M89	31-8	1920	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
M89	31-8	1920	Mon	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
M89	31-8	1926	Mon	5500	V 7NPE (x3) DE QV5B (x2)	CW	(JPL)
M89	31-8	1929	Mon	4720	VVV WNF (x3) DE FXM (x2) QSA ? QSV K	CW	(JPL)
M89d	2-8	0003	Sun	8073	XSV85 data traffic	4+4 QPSK 75/1000 LSB	(JPL)
M89d	6-8	0018	Thu	8073	XSV85 data traffic	4+4 QPSK 75/1000 LSB	(JPL)
M89d	22-8	1130	Sat	8073	XSV85 digital data	4+4 QPSK 75/1000 LSB	(JPL)
M89d	23-8	1130	Sun	8073	XSV85 digital data	4+4 QPSK 75/1000 LSB	(JPL)
M89d	26-8	0003	Wed	8073	XSV85 data traffic	4+4 QPSK 75/1000 LSB	(JPL)
M89d	26-8	1132	Wed	8073	XSV85 data traffic	4+4 QPSK 75/1000 LSB	(JPL)
M89d	27-8	1132	Thu	8073	XSV85 data traffic	4+4 QPSK 75/1000 LSB	(JPL)
M89d	28-8	1131	Fri	8073	XSV85 data traffic	4+4 QPSK 75/1000 LSB	(JPL)
M89d	30-8	0002	Sun	8073	XSV85 data traffic	4+4 QPSK 75/1000 LSB	(JPL)
M89v	1-8	0020	Sat	8073	Voice traffic	USB	(JPL)
M89v	2-8	0001	Sun	8073	XSV85 voice traffic	USB	(JPL)
M89v	2-8	0028	Sun	8073	XSV85 voice traffic	USB	(JPL)
M89v	6-8	0019	Thu	8073	XSV85 voice traffic	USB	(JPL)
M89v	6-8	1214	Thu	8073	XSV85 voice traffic	USB	(JPL)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
M89v	10-8	1152	Mon	8073	XSV85 voice traffic	USB	(JPL)
M89v	13-8	1148	Thu	8073	XSV85 voice traffic	USB	(JPL)
M89v	22-8	1130	Sat	8073	XSV85 voice callup	USB	(JPL)
M89v	22-8	1210	Sat	8073	XSV85 voice traffic	USB	(JPL)
M89v	23-8	1130	Sun	8073	XSV85 voice callup	USB	(JPL)
M89v	24-8	1155	Mon	8073	XSV85 voice traffic	USB	(JPL)
M89v	25-8	0019	Tue	8073	XSV85 voice traffic	USB	(JPL)
M89v	26-8	0001	Wed	8073	XSV85 voice callup	USB	(JPL)
M89v	26-8	0034	Wed	8073	XSV85 voice traffic	USB	(JPL)
M89v	26-8	1130	Wed	8073	XSV85 voice callup	USB	(JPL)
M89v	26-8	1202	Wed	8073	XSV85 voice traffic	USB	(JPL)
M89v	27-8	1130	Thu	8073	XSV85 voice callup	USB	(JPL)
M89v	28-8	1130	Fri	8073	XSV85 voice callup	USB	(JPL)
M89v	28-8	1157	Fri	8073	XSV85 voice traffic	USB	(JPL)
M89v	30-8	0001	Sun	8073	XSV85 voice callup	USB	(JPL)
M89v	30-8	0023	Sun	8073	XSV85 voice traffic	USB	(JPL)
M89v	30-8	1202	Sun	8073	XSV85 voice traffic	USB	(JPL)
MX	1-8	2029	Sat	4150	Beacon "V"	CW	(AB)
MX	1-8	2032	Sat	8497.5	Beacon "L"	CW	(AB)
MX	2-8	2027	Sun	7508.9	Beacon "S" Severomorsk	CW	(AB)
MX	2-8	2027	Sun	7509	Beacon "C" Moscow	CW	(AB)
MX	2-8	2027	Sun	7508.7	Beacon "D" Sevastopol	CW	(AB)
MX	2-8	2029	Sun	8497.5	Beacon "L"	CW	(AB)
MX	6-8	1943	Thu	4150	Beacon "V"	CW	(AB)
MX	12-8	1833	Wed	4150	Beacon "V"	CW	(AB)
MX	12-8	1850	Wed	7508.7	Beacon "D" Sevastopol	CW	(AB)
MX	12-8	1850	Wed	7508.9	Beacon "S" Severomorsk	CW	(AB)
MX	12-8	1850	Wed	7509	Beacon "C" Moscow	CW	(AB)
MX	12-8	1851	Wed	16331.7	Beacon "D" Sevastopol	CW	(AB)
MX	12-8	1851	Wed	16331.9	Beacon "S" Severomorsk	CW	(AB)
MX	12-8	1851	Wed	16332	Beacon "C" Moscow	CW	(AB)
MX	12-8	1852	Wed	13527.7	Beacon "D" Sevastopol	CW	(AB)
MX	12-8	1852	Wed	13527.9	Beacon "S" Severomorsk	CW	(AB)
MX	12-8	1852	Wed	13528	Beacon "C" Moscow	CW	(AB)
MX	12-8	1853	Wed	10871.7	Beacon "D" Sevastopol	CW	(AB)
MX	12-8	1853	Wed	10871.9	Beacon "S" Severomorsk	CW	(AB)
MX	12-8	1853	Wed	10872	Beacon "C" Moscow	CW	(AB)
MX	12-8	1854	Wed	8497.5	Beacon "L"	CW	(AB)
MX	12-8	1855	Wed	5153.9	Beacon "S" Severomorsk	CW	(AB)
MX	12-8	1855	Wed	5153.7	Beacon "D" Sevastopol	CW	(AB)
MX	23-8	1938	Sun	4150	Beacon "V"	CW	(AB)
MX	23-8	1942	Sun	8497.8	Beacon "L"	CW	(AB)
MX	23-8	1944	Sun	7509	Beacon "C" Moscow	CW	(AB)
MX	23-8	1944	Sun	7508.9	Beacon "S" Severomorsk	CW	(AB)
MX	23-8	1944	Sun	3493.9	Beacon "S" Severomorsk	CW	(AB)
MX	23-8	1944	Sun	7508.7	Beacon "D" Sevastopol	CW	(AB)
MX	23-8	1946	Sun	4558	Beacon "C" Moscow	CW	(AB)
MX	23-8	1946	Sun	3493.7	Beacon "D" Sevastopol	CW	(AB)
MX	23-8	1946	Sun	3494	Beacon "C" Moscow	CW	(AB)
MX	23-8	1946	Sun	4557.7	Beacon "D" Sevastopol	CW	(AB)
MX	23-8	1946	Sun	4557.9	Beacon "S" Severomorsk	CW	(AB)
MX	23-8	1949	Sun	5154	Beacon "C" Moscow	CW	(AB)
MX	23-8	1949	Sun	5153.9	Beacon "S" Severomorsk	CW	(AB)
MX	23-8	1949	Sun	5153.7	Beacon "D" Sevastopol	CW	(AB)
MX	24-8	1612	Mon	16332.4	Beacon "M" Magadan	CW	(AB-HK)
MX	24-8	1612	Mon	20048.4	Beacon "M" Magadan	CW	(AB-HK)
MX	24-8	1612	Mon	13528.2	Beacon "F" Vladivostok	CW	(AB-HK)
MX	24-8	1612	Mon	13528.4	Beacon "M" Magadan	CW	(AB-HK)
MX	24-8	1612	Mon	16332.2	Beacon "F" Vladivostok	CW	(AB-HK)
MX	24-8	1613	Mon	7039.2	Beacon "F" Vladivostok	CW	(AB-HK)
MX	24-8	1613	Mon	10872.4	Beacon "M" Magadan	CW	(AB-HK)
MX	24-8	1613	Mon	7039.4	Beacon "M" Magadan	CW	(AB-HK)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
MX	24-8	2232	Mon	8000	Beacon "C" Moscow	CW	(Lan)
MX	25-8	0046	Tue	8000	Beacon "C" Moscow	CW	(MCO)
MX	25-8	2350	Tue	8000	Beacon "C" Moscow	CW	(HS)
MX	31-8	1927	Mon	4150	Beacon "V"	CW	(AB)
POL	2-8	1305	Sun	7727	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	2-8	1310	Sun	7727	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	2-8	1405	Sun	14972	0877 0877 0877 0877 0877 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	2-8	1410	Sun	14972	0877 0877 0877 0877 0877 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	2-8	1525	Sun	16005	0221 0221 0221 0221 0221 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	2-8	1530	Sun	16005	0221 0221 0221 0221 0221 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	2-8	1610	Sun	16112	0797 0797 0797 0797 0797 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	2-8	1615	Sun	16112	0797 0797 0797 0797 0797 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	3-8	0800	Mon	6480	0434 88888 88888 00206 86752 18870 ... 48953 47728 31398 88888 88888 00034 00034	FSK 100/740	(AB)
POL	3-8	0805	Mon	6480	0434 88888 88888 00206 86752 18870 ... 48953 47728 31398 88888 88888 00034 00034	FSK 100/740	(AB)
POL	3-8	0815	Mon	13046	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	3-8	0820	Mon	13046	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	3-8	0845	Mon	13424	0353 88888 88888 55959 81584 47886 ... 65732 60750 15470 88888 88888 00039 00039	FSK 100/740	(AB)
POL	3-8	0850	Mon	13424	0353 88888 88888 55959 81584 47886 ... 65732 60750 15470 88888 88888 00039 00039	FSK 100/740	(AB)
POL	3-8	1305	Mon	7837	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	3-8	1310	Mon	7837	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	4-8	0630	Tue	13470	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	4-8	0635	Tue	13470	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	4-8	0655	Tue	14575	0684 88888 88888 14496 26705 85211 ... 27098 04736 36422 88888 88888 00038 00038	FSK 100/740	(AB)
POL	4-8	0700	Tue	14575	0684 88888 88888 14496 26705 85211 ... 27098 04736 36422 88888 88888 00038 00038	FSK 100/740	(AB)
POL	4-8	0730	Tue	14940	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	4-8	0735	Tue	14940	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	4-8	0900	Tue	8423	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	4-8	0905	Tue	8423	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	4-8	1005	Tue	12067	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	4-8	1010	Tue	12067	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	4-8	1030	Tue	10210	0355 0325 0325 0325 0325 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	4-8	1035	Tue	10210	0355 0325 0325 0325 0325 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	4-8	1245	Tue	15690	0132 0132 0132 0132 0132 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	4-8	1250	Tue	15690	0132 0132 0132 0132 0132 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	5-8	0530	Wed	13537	0453 88888 88888 54749 04730 33703 ... 17688 49051 25984 88888 88888 00035 00035	FSK 100/625	(AB)
POL	5-8	0535	Wed	13537	0453 88888 88888 54749 04730 33703 ... 17688 49051 25984 88888	FSK 100/625	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
					88888 00035 00035		
POL	5-8	0545	Wed	13424	0353 88888 88888 55959 81584 47886 ... 65732 60750 15470 88888 88888 00039 00039	FSK 100/625	(AB)
POL	5-8	0550	Wed	13424	0353 88888 88888 55959 81584 47886 ... 65732 60750 15470 88888 88888 00039 00039	FSK 100/625	(AB)
POL	5-8	1245	Wed	15690	0132 0132 0132 0132 0132 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	5-8	1250	Wed	15690	0132 0132 0132 0132 0132 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	5-8	1305	Wed	7837	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	5-8	1310	Wed	7837	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	6-8	0630	Thu	13470	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	6-8	0635	Thu	13470	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000	FSK 100/740	(AB)
POL	6-8	0730	Thu	14940	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	6-8	0735	Thu	14940	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	6-8	0800	Thu	6480	0434 88888 88888 00206 86752 18870 ... 48953 47728 31398 88888 88888 00034 00034	FSK 100/625	(AB)
POL	6-8	0805	Thu	6480	0434 88888 88888 00206 86752 18870 ... 48953 47728 31398 88888 88888 00034 00034	FSK 100/625	(AB)
POL	6-8	1000	Thu	16388	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	6-8	1005	Thu	16388	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	6-8	1305	Thu	7727	0437 88888 88888 03894 81176 58370 ... 74593 74968 75025 88888 88888 00037 00037	FSK 100/625	(AB)
POL	6-8	1310	Thu	7727	0437 88888 88888 03894 81176 58370 ... 74593 74968 75025 88888 88888 00037 00037	FSK 100/625	(AB)
POL	7-8	0530	Fri	13537	0453 88888 88888 54749 04730 33703 ... 17686 49051 25984 88888 88888 00035 00035	FSK 100/625	(AB)
POL	7-8	0535	Fri	13537	0453 88888 88888 54749 04730 33703 ... 17686 49051 25984 88888 88888 00035 00035	FSK 100/625	(AB)
POL	7-8	0655	Fri	14575	0684 88888 88888 14496 26705 85211 ... 27098 04736 36422 88888 88888 00038 00038	FSK 100/625	(AB)
POL	7-8	0700	Fri	14575	0684 88888 88888 14496 26705 85211 ... 27098 04736 36422 88888 88888 00038 00038	FSK 100/625	(AB)
POL	7-8	0815	Fri	13046	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	7-8	0820	Fri	13046	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	7-8	0900	Fri	8423	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	7-8	0905	Fri	8423	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	7-8	1005	Fri	12067	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	7-8	1010	Fri	12067	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	7-8	1405	Fri	14972	Polish Intel.	FSK 100/625	(AB)
POL	7-8	1410	Fri	14972	Polish Intel.	FSK 100/625	(AB)
POL	9-8	1305	Sun	7727	0437 88888 88888 03894 81176 58370 ... 74593 74968 75025 88888 88888 00037 00037	FSK 100/625	(AB)
POL	9-8	1310	Sun	7727	0437 88888 88888 03894 81176 58370 ... 74593 74968 75025 88888 88888 00037 00037	FSK 100/625	(AB)
POL	9-8	1525	Sun	16005	0221 88888 unreadable	FSK 100/625	(AB)
POL	9-8	1530	Sun	16005	0221 88888 unreadable	FSK 100/625	(AB)
POL	10-8	0800	Mon	6480	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	10-8	0805	Mon	6480	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	10-8	0815	Mon	13046	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
POL	10-8	0820	Mon	13046	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	10-8	0845	Mon	13424	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	10-8	0850	Mon	13424	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	10-8	1000	Mon	16388	Polish Intel.	FSK 100/625	(AB)
POL	10-8	1005	Mon	16388	Polish Intel.	FSK 100/625	(AB)
POL	10-8	1305	Mon	7837	0547 88888 88888 13084 36220 06468 ... 80150 56097 69116 88888 88888 00037 00037	FSK 100/625	(AB)
POL	10-8	1310	Mon	7837	0547 88888 88888 13084 36220 06468 ... 80150 56097 69116 88888 88888 00037 00037	FSK 100/625	(AB)
POL	11-8	0630	Tue	13470	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	0635	Tue	13470	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	0655	Tue	14575	0684 0684 0684 0684 0684 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	0700	Tue	14575	0684 0684 0684 0684 0684 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	0730	Tue	14940	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	0735	Tue	14940	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	0900	Tue	8423	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	0905	Tue	8423	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	1005	Tue	12067	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	1010	Tue	12067	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	1030	Tue	10210	0325 0325 0325 0325 0325 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	1035	Tue	10210	0325 0325 0325 0325 0325 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	1245	Tue	15690	0132 0132 0132 0132 0132 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	11-8	1250	Tue	15690	0132 0132 0132 0132 0132 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	12-8	0530	Wed	13537	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	12-8	0535	Wed	13537	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	12-8	0845	Wed	13424	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	12-8	0850	Wed	13424	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	12-8	1245	Wed	15690	0132 0132 0132 0132 0132 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	12-8	1250	Wed	15690	0132 0132 0132 0132 0132 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	13-8	0630	Thu	13470	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	13-8	0635	Thu	13470	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	13-8	0730	Thu	14940	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	13-8	0735	Thu	14940	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	13-8	0800	Thu	6480	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	13-8	0805	Thu	6480	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	13-8	0900	Thu	16388	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	13-8	0905	Thu	16388	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
					00000 00000 00000 00000		
POL	13-8	1305	Thu	7727	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	13-8	1310	Thu	7727	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	14-8	0530	Fri	13537	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	14-8	0535	Fri	13537	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	14-8	0815	Fri	13046	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	14-8	0820	Fri	13046	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	14-8	0900	Fri	8423	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	14-8	0905	Fri	8423	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	14-8	1005	Fri	12067	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 06000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	14-8	1005	Fri	14972	0877 88888 88888 03496 24338 51807 ... 91880 25001 00563 88888 88888 00035 00035	FSK 100/625	(AB)
POL	14-8	1010	Fri	12067	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 06000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	14-8	1010	Fri	14972	0877 88888 88888 03496 24338 51807 ... 91880 25001 00563 88888 88888 00035 00035	FSK 100/625	(AB)
POL	16-8	1005	Sun	14972	0877 88888 88888 03496 24338 51807 ... 91880 25001 00563 88888 88888 00035 00035	FSK 100/625	(AB)
POL	16-8	1010	Sun	14972	0877 88888 88888 03496 24338 51807 ... 91880 25001 00563 88888 88888 00035 00035	FSK 100/625	(AB)
POL	16-8	1305	Sun	7727	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	16-8	1310	Sun	7727	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	17-8	0800	Mon	6480	0434 0434 0434 0434 0434 00000 0000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	17-8	0805	Mon	6480	0434 0434 0434 0434 0434 00000 0000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	17-8	0815	Mon	13046	0446 88888 88888 91150 73428 97019 ... 77087 96523 05898 88888 88888 00041 00041	FSK 100/625	(AB)
POL	17-8	0820	Mon	13046	0446 88888 88888 91150 73428 97019 ... 77087 96523 05898 88888 88888 00041 00041	FSK 100/625	(AB)
POL	17-8	0850	Mon	13424	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	17-8	0855	Mon	13424	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	17-8	1000	Mon	16388	0765 88888 88888 83775 82400 84010 ... 18391 65280 88888 88888 00041 00041	FSK 100/625	(AB)
POL	17-8	1005	Mon	16388	0765 88888 88888 83775 82400 84010 ... 18391 65280 88888 88888 00041 00041	FSK 100/625	(AB)
POL	17-8	1305	Mon	7837	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	17-8	1310	Mon	7837	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	18-8	0630	Tue	13470	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	18-8	0635	Tue	13470	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	19-8	0845	Wed	11324	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	19-8	0850	Wed	11324	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	19-8	1245	Wed	15690	0132 88888 88888 61414 38679 62040 ... 62496 51435 67268 88888 88888 0034 0034	FSK 100/625	(AB-FNL)
POL	19-8	1250	Wed	15690	0132 88888 88888 61414 38679 62040 ... 62496 51435 67268 88888 88888 0034 0034	FSK 100/625	(AB-FNL)
POL	19-8	1305	Wed	7837	0547 0547 0547 0547 0547 00000 00000000000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrlb
POL	19-8	1310	Wed	7837	0547 0547 0547 0547 0547 00000 0000000000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000	(AB)	
POL	20-8	0730	Thu	14940	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	20-8	0735	Thu	14940	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	21-8	0530	Fri	13537	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	21-8	0535	Fri	13537	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	21-8	0655	Fri	14575	0684 0684 0684 0684 0684 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	21-8	0700	Fri	14575	0684 0684 0684 0684 0684 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	21-8	0815	Fri	13046	0446 88888 88888 91150 73428 97019 ... 77087 96523 05898 88888 FSK 100/625 88888 00041 00041	(AB)	
POL	21-8	0820	Fri	13046	0446 88888 88888 91150 73428 97019 ... 77087 96523 05898 88888 FSK 100/625 88888 00041 00041	(AB)	
POL	21-8	0900	Fri	8423	0554 88888 88888 39217 21361 31251 ... 22869 81076 86050 88888 FSK 100/625 88888 00037 00037	(AB)	
POL	21-8	0905	Fri	8423	0554 88888 88888 39217 21361 31251 ... 22869 81076 86050 88888 FSK 100/625 88888 00037 00037	(AB)	
POL	21-8	1405	Fri	14972	0877 0877 0877 0877 0877 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	21-8	1410	Fri	14972	0877 0877 0877 0877 0877 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	23-8	1305	Sun	7727	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	23-8	1310	Sun	7727	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	24-8	0800	Mon	6480	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	24-8	0805	Mon	6480	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	24-8	0850	Mon	13424	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	24-8	0855	Mon	13424	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	24-8	1000	Mon	16388	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	24-8	1005	Mon	16388	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	24-8	1305	Mon	7837	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	24-8	1310	Mon	7837	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	24-8	1525	Mon	16005	0221 0221 0221 0221 0221 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	24-8	1530	Mon	16005	0221 0221 0221 0221 0221 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	25-8	0630	Tue	13470	0574 88888 88888 51154 02665 14706 ... 02731 49952 28500 88888 FSK 100/625 88888 00034 00034	(AB)	
POL	25-8	0631	Tue	13470	0574 88888 88888 51154 02665 14706 ... 02731 49952 28500 88888 FSK 100/625 88888 00034 00034 starts too early	(AB)	
POL	25-8	0635	Tue	13470	0574 88888 88888 51154 02665 14706 ... 02731 49952 28500 88888 FSK 100/625 88888 00034 00034	(AB)	
POL	27-8	0800	Thu	6480	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	27-8	0805	Thu	6480	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	28-8	0530	Fri	13537	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	28-8	0540	Fri	13537	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	28-8	0655	Fri	14575	0684 0684 0684 0684 0684 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	
POL	28-8	0700	Fri	14575	0684 0684 0684 0684 0684 00000 00000 00000 00000 00000 00000 FSK 100/625 00000 00000 00000 00000	(AB)	

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
POL	28-8	0815	Fri	13046	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	28-8	0820	Fri	13046	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	28-8	0900	Fri	8423	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	28-8	0905	Fri	8423	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	28-8	1005	Fri	12067	0675 88888 88888 19762 85743 31755 ... 20918 18450 96745 88888 88888 00038 00038	FSK 100/625	(AB)
POL	28-8	1010	Fri	12067	0675 88888 88888 19762 85743 31755 ... 20918 18450 96745 88888 88888 00038 00038	FSK 100/625	(AB)
POL	28-8	1405	Fri	14972	Polish Intel.	FSK 100/625	(AB)
POL	28-8	1410	Fri	14972	Polish Intel.	FSK 100/625	(AB)
POL	31-8	1305	Mon	7837	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
POL	31-8	1310	Mon	7837	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000	FSK 100/625	(AB)
S06	7-8	0830	Fri	16327	842 160 39 49626 64103 28778 ... 34736 38779 22915 160 39 00000	USB	(AB)
S06	7-8	0930	Fri	13875	842 160 39 49626 64103 28778 ... 34736 38779 22915 160 39 00000	USB	(AB)
S06	14-8	0830	Fri	16327	842 359 40 82229 29778 33149 ... 86898 85857 91468 359 40 00000	USB	(AB)
S06	14-8	0930	Fri	13875	842 359 40 82229 29778 33149 ... 86898 85857 91468 359 40 00000	USB	(AB)
S06	17-8	0830	Mon	8221	371 862 5 33276 31831 12543 32335 88879 862 5 00000	USB	(AB)
S06	17-8	0840	Mon	9353	371 862 5 33276 31831 12543 32335 88879 862 5 00000	USB	(AB)
S06	21-8	0830	Fri	16327	842 760 41 77126	USB	(HFD)
S06	21-8	0930	Fri	13875	842	USB	(HFD)
S06	22-8	1600	Sat	8167	491 491 491 00000	USB	(HFD)
S06	28-8	0830	Fri	16327	Barely audible	USB	(AB)
S06s	3-8	0830	Mon	8221	371 452 6 35444 81434 39706 31728 46039 35488 452 6 00000	USB	(AB)
S06s	3-8	1200	Mon	10230	831 572 6 33796 13577 74526 46647 79302 25616 592 6 00000	USB	(AB)
S06s	3-8	1210	Mon	12165	831 572 6 33796 13577 74526 46647 79302 25616 592 6 00000	USB	(AB)
S06s	4-8	0600	Tue	15945	438 256 7 42169 40614 77249 40678 57440 10597 47660 256 7 00000	AM	(AB)
S06s	4-8	0610	Tue	16945	438 256 7 42169 40614 77249 40678 57440 10597 47660 256 7 00000	AM	(AB)
S06s	4-8	0730	Tue	7365	427 591 6 33494 33845 46931 44333 31613 33864 591 6 00000	AM	(AB)
S06s	4-8	0740	Tue	11655	427 591 6 33494 33845 46931 44333 31613 33864 591 6 00000	AM	(AB)
S06s	4-8	0800	Tue	14373	352 891 6 36126 33486 36777 34432 34341 45249 891 6 00000	USB	(AB)
S06s	4-8	0810	Tue	12935	352 891 6 36126 33486 36777 34432 34341 45249 891 6 00000	USB	(AB)
S06s	4-8	1110	Tue	7560	754	USB	(AB)
S06s	4-8	1510	Tue	7744	537 894 6 33796 13577 74526 43647 79302 53516 894 6 00000	USB	(AB)
S06s	5-8	0540	Wed	12560	464 893 5 52401 63919 92699 14600 74248 893 5 00000	USB	(AB)
S06s	5-8	0730	Wed	12110	745 201 6 83426 48433 33014 33730 88962 82882 201 6 00000	USB	(AB)
S06s	5-8	0740	Wed	14977	745 201 6 83426 48433 33014 33730 88962 82882 201 6 00000	AM	(AB)
S06s	5-8	0740	Wed	14977	745 201 6 83426 48433 33014 33730 88962 82882 201 6 00000	USB	(AB)
S06s	5-8	0820	Wed	9485	471 925 6 57440 10597 23521 47660 92883 69901 925 6 00000	USB	(AB)
S06s	5-8	0830	Wed	11085	471 925 6 57440 10597 23521 47660 92883 69901 925 6 00000	USB	(AB)
S06s	5-8	1000	Wed	14850	729 801 5 38907 34620 33228 83377 43671 801 5 00000	USB	(AB)
S06s	5-8	1010	Wed	16020	729 801 5 38907 34620 33228 83377 43671 801 5 00000	USB	(AB)
S06s	6-8	1200	Thu	13145	425 873 6 73922 36149 03748 72834 01185 73802 873 6 00000	AM	(AB)
S06s	6-8	1210	Thu	14535	425 873 6 73922 36149 03748 72834 01185 73802 873 6 00000	AM	(AB)
S06s	7-8	0600	Fri	7845	196 428 5 37453 44856 84363 33046 36126 428 5 00000	USB	(AB)
S06s	7-8	0610	Fri	9125	196 428 5 37453 44856 84363 33046 36126 428 5 00000	USB	(AB)
S06s	7-8	0930	Fri	10290	516 823 7 29984 84654 16043 41338 92372 20184 92089 823 7 00000	USB	(AB)
S06s	7-8	0940	Fri	9655	516 823 7 29984 84654 16043 41338 92372 20184 92089 823 7 00000	USB	(AB)
S06s	8-8	0640	Sat	14875	524 524 524 00000	USB	(HFD)
S06s	9-8	0630	Sun	16320	524 908 6 83517 73901 63829 01158 93562 89203 908 6 00000	USB	(AB)
S06s	9-8	0640	Sun	14875	524 908 6 83517 73901 63829 01158 93562 89203 908 6 00000	USB	(AB)
S06s	10-8	0900	Mon	16380	872 936 5 36489 48648 33184 43886 45494 936 5 00000	USB	(AB)
S06s	10-8	0910	Mon	14835	872 936 5 36489 48648 33184 43886 45494 936 5 00000	USB	(AB)
S06s	10-8	1200	Mon	10230	831 572 6 33796 13577 74526 46647 79302 25616 572 6 00000	AM	(AB)
S06s	10-8	1210	Mon	12165	831 572 6 33796 13577 74526 46647 79302 25616 572 6 00000	AM	(AB)
S06s	11-8	0715	Tue	6780	374 892 5 36489 48648 33184 43886 45494 892 5 00000	AM	(AB)
S06s	11-8	0730	Tue	7365	427 591 6 33494 33845 46931 44333 31613 33860 591 6 00000	AM	(AB)
S06s	11-8	0740	Tue	11655	427 591 6 33494 33845 46931 44333 31613 33860 591 6 00000	AM	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
S06s	11-8	0800	Tue	14373	352 891 6 36126 33486 36777 34432 34341 45249 891 6 00000	USB	(AB)
S06s	11-8	0810	Tue	12935	352 891 6 36126 33486 36777 34432 34341 45249 891 6 00000	USB	(AB)
S06s	11-8	1100	Tue	7560	754 906 8 43871 43498 34654 89083 89348 49325 80429 34132 906 8 00000	USB	(AB)
S06s	11-8	1100	Tue	6810	754 906 8 43871 43498 34654 89083 89348 49325 80429 34132 906 8 00000	USB	(AB)
S06s	11-8	1500	Tue	6766	537 894 6 33796 13577 74526 46647 79302 53516 894 6 00000	USB	(AB)
S06s	11-8	1510	Tue	7744	537 894 6 33796 13577 74526 46647 79302 53516 894 6 00000	USB	(AB)
S06s	12-8	0530	Wed	11565	464 893 5 52401 63919 92699 14600 74248 893 5 00000	USB	(AB)
S06s	12-8	0540	Wed	12560	464 893 5 52401 63919 92699 14600 74248 893 5 00000	USB	(AB)
S06s	12-8	0730	Wed	12110	745 201 6 83426 48433 33014 33730 88962 82882 201 6 00000	AM	(AB)
S06s	12-8	0740	Wed	14977	745 201 6 83426 48433 33014 33730 88962 82882 201 6 00000	AM	(AB)
S06s	12-8	0830	Wed	11085	471 925 6 57440 10597 23521 47660 92883 69901 925 6 00000	USB	(AB)
S06s	13-8	0900	Thu	12952	167 423 5 88397 44942 80383 32484 36344 423 5 00000	USB	(AB)
S06s	13-8	0930	Thu	9255	314 502 6 33365 41185 80383 32484 36344 36228 502 6 00000	USB	(AB)
S06s	13-8	0940	Thu	10325	314 502 6 33365 41185 80383 32484 36344 36228 502 6 00000	USB	(AB)
S06s	13-8	1200	Thu	13145	425 873 6 73922 36149 03748 72834 01185 73802 873 6 00000	AM	(AB)
S06s	13-8	1210	Thu	14535	425 873 6 73922 36149 03748 72834 01185 73802 873 6 00000	AM	(AB)
S06s	14-8	0930	Fri	10290	516 823 7 29984 84654 16043 41338 92372 20184 92089 823 7 00000	AM	(AB)
S06s	14-8	0940	Fri	9655	516 823 7 29984 84654 16043 41338 92372 20184 92089 823 7 00000	AM	(AB)
S06s	17-8	0900	Mon	16380	872 930 5 84428 41727 33373 30953 83426 930 5 00000	AM	(AB)
S06s	17-8	0910	Mon	14835	872 930 5 84428 41727 33373 30953 83426 930 5 00000	AM	(AB)
S06s	17-8	1200	Mon	10230	831 946 5 88397 44942 80383 32484 36344 946 5 00000	USB	(AB)
S06s	17-8	1210	Mon	12165	831 946 5 88397 44942 80383 32484 36344 946 5 00000	USB	(AB)
S06s	18-8	1010	Tue	5660	893 270 5 #####	USB	(HFD)
S06s	18-8	1110	Tue	7560	754 ...	USB	(AB)
S06s	18-8	1500	Tue	6766	537 964 8 36073 46044 86219 36221 18443 83529 89196 30777 964 8 00000	USB	(AB)
S06s	18-8	1510	Tue	7744	537 964 8 36073 46044 86219 36221 18443 83529 89196 30777 964 8 00000	USB	(AB)
S06s	23-8	0630	Sun	16320	524 987 6 36489 48648 33184 43886 45494 81397 987 6 00000	AM	(AB)
S06s	23-8	0640	Sun	14875	524 987 6 36489 48648 33184 43886 45494 81397 987 6 00000	AM	(AB)
S06s	24-8	0910	Mon	14835	872 930 5 84428 41727 33373 30953 83426 930 5 00000	USB	(AB)
S06s	24-8	1200	Mon	10230	831 946 5 88397 44942 80383 32484 36344 946 5 00000	AM	(AB)
S06s	24-8	1210	Mon	12165	831 946 5 88397 44942 80383 32484 36344 946 5 00000	AM	(AB)
S06s	30-8	0630	Sun	16320	524 524 524 00000	USB	(HFD)
S11a	3-8	1015	Mon	15630	475/00	USB	(AB)
S11a	4-8	0915	Tue	8530	484/00	USB	(AB)
S11a	6-8	1015	Thu	16530	475/00	USB	(AB)
S11a	7-8	0455	Fri	5149	320/31 Vnimanie 14079 94509 96651 ... 95694 13408 14351 Vnimanie, spr msg, out	USB	(AB)
S11a	7-8	0915	Fri	8530	484/00	USB	(AB)
S11a	7-8	1020	Fri	11581	426/00	USB	(AB)
S11a	11-8	1020	Tue	11581	426/00	USB	(AB)
S11a	12-8	1955	Wed	4870	371/00	USB	(AB)
S11a	14-8	1020	Fri	11581	426/00	USB	(AB)
S11a	14-8	1955	Fri	4870	371/00	USB	(AB)
S11a	21-8	1020	Fri	11581	426/00	USB	(AB)
S11a	24-8	1015	Mon	16530	475/00	USB	(AB)
S11a	28-8	0915	Fri	8530	484/00	USB	(AB)
S11a	28-8	1020	Fri	11581	420/34 Vnimanie 19762 85743 31755 ... 20918 18450 96745 Vnimanie, rpt msg, out	USB	(AB)
S28	3-8	0934	Mon	4625	MDZhB 08 475 ADYeONOMA 8350 7084	USB	(Priyom)
S28	3-8	0956	Mon	4625	MDZhB 65 274 UDAR 7228 4685	USB	(Priyom)
S28	3-8	1252	Mon	4625	MDZhB 75 544 SDANNYJ 4521 0065	USB	(Priyom)
S28	3-8	1350	Mon	4625	MDZhB 18 584 OZONID 7650 2887	USB	(Priyom)
S28	6-8	0644	Thu	4625	MDZhB 66 923 EGRIDIF 8022 7322	USB	(Priyom)
S28	12-8	0644	Wed	4625	MDZhB 14 874 SOUChASTIYe 0250 9533	USB	(Priyom)
S28	12-8	0748	Wed	4625	MDZhB 31 055 KOTINAZIN 3994 9236	USB	(Priyom)
S28	12-8	0803	Wed	4625	MDZhB 53 681 BOTVYeT 9802 4789	USB	(Priyom)
S28	13-8	1024	Thu	4625	MDZhB 32 850 UGLYeRODNYJ 1187 2569	USB	(Priyom)
S28	13-8	1113	Thu	4625	MDZhB 19 983 AGYeNTURNYJ 8859 5814	USB	(Priyom)
S28	17-8	0804	Mon	4625	MDZhB 12 889 YaGYel' 6870 5676	USB	(Priyom)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
S28	17-8	0806	Mon	4625	MDZhB 11 003 YeGYeLON 1811 2814	USB	(Priyom)
S28	18-8	1356	Tue	4625	1 2 3 4 5 6 7 8 9 0 Test count on top of the marker	USB	(Priyom)
S28	20-8	0818	Thu	4625	MDZhB 50 931 AGATU 6688 4832	USB	(Priyom)
S28	23-8	0741	Sun	4625	MDZhB 17 650 OVChYeTINA 9473 7781	USB	(Priyom)
S28	24-8	0806	Mon	4625	MDZhB 58 651 DVUKRAN 8851 8222	USB	(Priyom)
S28	24-8	1103	Mon	4625	MDZhB 76 548 AVTONOMNYJ 7619 7776	USB	(Priyom)
S28	27-8	0952	Thu	4625	MDZhB 76 518 AVTOKOD 1513 2401	USB	(Priyom)
S28	27-8	1122	Thu	4625	MDZhB 81 494 YeVGYeNIYa 9131 7265	USB	(Priyom)
S28	29-8	0601	Sat	4625	MDZhB CYeNTIM 61 51	USB	(Priyom)
S28	30-8	1551	Sun	4625	MDZhB 36 787 DVOROVYJ 8657 9323	USB	(Priyom)
S28	31-8	0559	Mon	4625	MDZhB PYeNSION 31 34	USB	(Priyom)
S30	4-8	1533	Tue	5448	8S1Shch weather warnings	USB	(Priyom)
S30	5-8	1819	Wed	3756	LI27 V2MZ SB7Z 'O6P Y8MV 6I2Zh 8CSchch' 27Shch' N1DU 53OB	USB	(Priyom)
S30	6-8	1607	Thu	5448	CI9V ZhSk4 HZ5T 5F5Shch 8MUO TUZR 5J7Shch DMC3 49FT C2ZA	USB	(Priyom)
S30	6-8	1818	Thu	3756	INNC ShchGJP TZLM FY5E F61N 37CN MUDR 7VNSchch Zh7NZh YMA5	USB	(Priyom)
S30	9-8	1850	Sun	3756	M7KS PMV5 L'GJ KZI' TShchShchS VKY1 HCLF 61HZh ZBIL L7O5	USB	(Priyom)
S30	13-8	1559	Thu	5448	8S1Shch SOLYeVARKA 60 54	USB	(Priyom)
S30	13-8	1705	Thu	5448	'U1B OSOG BO6C F56Shch 9GSA ZhBZI 4RVZ 3VS' DKJ1 ZhD9V	USB	(Priyom)
S30	14-8	1559	Fri	5448	8S1Shch SOLYeVARKA 60 54	USB	(Priyom)
S30	22-8	1736	Sat	3756	Zh7NZh YMA5 VTH3 AGDT 'U1B OSOG BO6C F56Shch 9GSA ZhBZU	USB	(Priyom)
S30	29-8	1854	Sat	3756	DKJ1 ZhD9V 42BV 81BR M7KS PMV5 L'GJ KZI' TShchShchS VKY1	USB	(Priyom)
S32	5-8	1928	Wed	3828	AL'FA-45 37 961 RAMANUT 4502 6910	USB	(Priyom)
S32	5-8	1932	Wed	3828	AL'FA-45 31 578 IRKA 0559 4438	USB	(Priyom)
S32	5-8	1936	Wed	3828	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39 error in reading	USB	(Priyom)
S32	5-8	2027	Wed	3828	AL'FA-45 73 670 ANALOJ 5209 2777	USB	(Priyom)
S32	6-8	1121	Thu	7009	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 Mic is not feeling well	USB	(Priyom)
S32	6-8	1734	Thu	5473	AL'FA-45 KIRChIK 65 34	USB	(Priyom)
S32	6-8	1848	Thu	3828	RUZh'E-26 DUBLYoR-68 KOVBOJ-39 STOROZh-62 NYeVKA-26 UTYoS-94 FONTAN-34 KURGAN-40 with PIP (S30) on background	USB	(Priyom)
S32	6-8	2049	Thu	3828	ALEUT-09 LANDYSh-74 KOVBOJ-39 DZhIGIT-46 PYeNZ-07 BIZON-64 PYeSOChNYJ-21 KARTA-11	USB	(Priyom)
S32	8-8	1613	Sat	7009	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39	USB	(Priyom)
S32	8-8	1732	Sat	7009	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34	USB	(Priyom)
S32	8-8	1909	Sat	7009	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 KURGAN-40 DUBLYoR-68 STUPA-32 with PIP (S30) on background	USB	(Priyom)
S32	9-8	0823	Sun	7009	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34 KURGAN-40 DUBLYoR-68 STUPA-32	USB	(Priyom)
S32	9-8	1241	Sun	7009	AL'FA-45 22 618 KABYeL'ShchIK 6997 6873 with PIP (S30) on background	USB	(Priyom)
S32	9-8	1300	Sun	7009	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 with PIP (S30) on background	USB	(Priyom)
S32	9-8	1349	Sun	7009	AL'FA-45 70 254 DYeLIMIN 3503 6561 with PIP (S30) on background	USB	(Priyom)
S32	10-8	1144	Mon	7009	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 KURGAN-40 DUBLYoR-68 STUPA-32	USB	(Priyom)
S32	10-8	1533	Mon	7009	AL'FA-45 86 748 MIRCYeN 4682 5215	USB	(Priyom)
S32	10-8	1607	Mon	7009	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39	USB	(Priyom)
S32	10-8	1819	Mon	7009	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34	USB	(Priyom)
S32	12-8	0641	Wed	7009	AL'FA-45 15 188 67 178 MYeIDUNIZM 5976 5810 MUZIChaR 6414 3685. Pip (S30) in background with callsign 8S1Shch	USB	(Priyom)
S32	12-8	0746	Wed	7009	AL'FA-45 12 297 TYeVONDA 9687 0668 with PIP (S30) on background	USB	(Priyom)
S32	12-8	0801	Wed	7009	AL'FA-45 79 335 IRONICHAN 5976 5810 with PIP (S30) on background	USB	(Priyom)
S32	12-8	0803	Wed	7009	AL'FA-45 26 260 CIMINAL' 6414 3683 with PIP (S30) on background	USB	(Priyom)
S32	12-8	0844	Wed	7009	AL'FA-45 87 238 13 065 POZITIVNYJ 7510 4372 YeNOLAZA 0277 8891. Pip (S30) in background	USB	(Priyom)
S32	12-8	0903	Wed	7009	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39 KURGAN-40 DUBLYoR-68 STUPA-32 with PIP (S30) on background	USB	(Priyom)
S32	13-8	1602	Thu	7009	AL'FA-45 ANALGYeZiYa 48 54	USB	(Priyom)
S32	13-8	1808	Thu	7009	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34	USB	(Priyom)
S32	14-8	0855	Fri	7009	AL'FA-45 GYeKBOMIT 01 09	USB	(Priyom)
S32	15-8	0903	Sat	7009	AL'FA-45 PRAVShchIK 00 23	USB	(Priyom)
S32	15-8	1001	Sat	7009	AL'FA-45 BYTNOST' 00 38	USB	(Priyom)
S32	17-8	0806	Mon	7009	AL'FA-45 20 011 BOLYuGA 9755 1918	USB	(Priyom)
S32	17-8	0815	Mon	7009	AL'FA-45 02 587 GLIZANTIN 7545 2342	USB	(Priyom)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
S32	19-8	0819	Wed	7009	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34	USB	(Priyom)
S32	19-8	1004	Wed	7009	KURGAN-40 DUBLYoR-68 STUPA-32 RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07. S30 in the background	USB	(Priyom)
S32	19-8	1937	Wed	7009	AL'FA-45 50 949 MAAR 0960 6694 SALASA 9045 2927. S30 in the back-ground	USB	(Priyom)
S32	20-8	0819	Thu	7009	AL'FA-45 98 728 IZMYeNShchIK 0780 9857. S30 in the background	USB	(Priyom)
S32	20-8	1220	Thu	7009	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27. S30 in the background	USB	(Priyom)
S32	20-8	1841	Thu	3828	KURGAN-40 DUBLYoR-68 STUPA-32 STOROZh-62 NYeVKA-26 KARTA-11 UTyoS-94 KOVBOJ-39 ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34. S30 in the background	USB	(Priyom)
S32	22-8	1839	Sat	3828	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27	USB	(Priyom)
S32	23-8	1048	Sun	7009	STOROZh-62 NYeVKA-26 KARTA-11 UTyoS-94 KOVBOJ-39	USB	(Priyom)
S32	23-8	1834	Sun	3828	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34	USB	(Priyom)
S32	29-8	1841	Sat	3828	STOROZh-62 NYeVKA-26 KARTA-11 UTyoS-94 KOVBOJ-39 RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07	USB	(Priyom)
S32	30-8	1554	Sun	7009	AL'FA-45 29 900 VISKAYeC 0830 1320	USB	(Priyom)
S32	30-8	1840	Sun	3828	STOROZh-62 NYeVKA-26 KARTA-11 UTyoS-94 KOVBOJ-39 ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34	USB	(Priyom)
S4525	6-8	1947	Thu	4525	Unid channel marker (dash)	USB	(AB)
S4525	12-8	1830	Wed	4525	Unid channel marker	USB	(AB)
S4525	13-8	2047	Thu	4525	Unid channel marker	USB	(AB)
S4525	14-8	1945	Fri	4525	Unid channel marker	USB	(AB)
S4525	15-8	2000	Sat	4525	Les 15, ja Sosna 2. 49150	USB	(DJPr)
S4525	15-8	2007	Sat	4525	Les 15, ja Sosna 2. 49150	USB	(DJPr)
S4525	15-8	2129	Sat	4525	Unid channel marker	USB	(AB)
S4525	16-8	1959	Sun	4525	Unid channel marker	USB	(AB)
S4525	19-8	2116	Wed	4525	Channel marker	USB	(AB)
S4525	20-8	1735	Thu	4525	Channel marker	USB	(AB-D)
S4525	23-8	1938	Sun	4525	Channel marker	USB	(AB)
S4525	31-8	1926	Mon	4525	Channel marker	USB	(AB)
S5292	1-8	2028	Sat	5292	Channel marker "B" but very often sending "D"	USB	(AB)
S5292	2-8	2026	Sun	5292	Channel marker "D"	CW	(AB)
S5292	3-8	2003	Mon	5292	Channel marker "D"	CW	(AB)
S5292	4-8	2003	Tue	5292	Channel marker "B"	CW	(AB)
S5292	5-8	0759	Wed	5292	BARZhA-08 48 261 MOLYaR 6728 4892	USB	(Priyom)
S5292	5-8	0803	Wed	5292	Test count 1 2 3 4 5 6 7 8 9 0	USB	(Priyom)
S5292	5-8	0805	Wed	5292	BOYeC-43 48 261 MOLYaR 6728 4892	USB	(Priyom)
S5292	5-8	1243	Wed	5292	BARZhA-08 37 899 DIADYeMA 3628 9547 count before the signal	USB	(Priyom)
S5292	5-8	1250	Wed	5292	BOYeC-43 37 899 DIADYeMA 3628 9547 count before the signal	USB	(Priyom)
S5292	6-8	0619	Thu	5292	Test count 1 2 3 4 5 6 7 8 9 0	USB	(Priyom)
S5292	6-8	0718	Thu	5292	SYeKRYeT-39 19 345 UGLOBUL'B 3728 3883 count before the signal read by female operator	USB	(Priyom)
S5292	6-8	0729	Thu	5292	RYeGATA-75 29 358 DASOVOJ 2638 9573 count before the signal	USB	(Priyom)
S5292	6-8	1204	Thu	5292	Test count 1 2 3 4 5 6 7 8 9 0	USB	(Priyom)
S5292	6-8	1314	Thu	5292	Test count 1 2 3 4 5 6 7 8 9 0	USB	(Priyom)
S5292	8-8	0821	Sat	5292	Test count 1 2 3 4 5 6 7 8 9 0	USB	(Priyom)
S5292	10-8	0817	Mon	5292	Test count 1 2 3 4 5 6 7 8 9 0	USB	(Priyom)
S5292	12-8	1829	Wed	5292	Channel marker "B"	USB	(AB)
S5292	14-8	1540	Fri	5292	Channel marker "B"	USB	(AB-FNL)
S5292	14-8	1651	Fri	5292	Channel marker "D", sometimes "B"	USB	(AB-FNL)
S5292	14-8	1942	Fri	5292	Channel marker "B"	USB	(AB)
S5292	16-8	2003	Sun	5292	Channel marker "D" and occasionally "B"	USB	(AB)
S5292	20-8	1915	Thu	5292	Channel marker "B"	USB	(AB)
S5292	23-8	1938	Sun	5292	Channel marker "D"	USB	(AB)
S5292	31-8	1926	Mon	5992	Channel marker "B"	USB	(AB)
UM10	5-8	0955	Wed	6793	Unid 10-mins net: JATD (new freq and id)	CW	(JPL-Sib)
UM10	6-8	0028	Thu	6793	Unid 10-mins net: JATD	CW	(JPL-Sib)
UM10	7-8	0155	Fri	6826	Unid 10-mins net: ZYVM (new callsign and freq.)	CW	(JPL-Sib)
UM10	7-8	2003	Fri	3343	Unid 10-mins net: LH5N (new callsign)	CW	(JPL-Sib)
UM10	8-8	1001	Sat	6826	Unid 10-mins net: ZYVM	CW	(JPL-Sib)
UM10	8-8	1701	Sat	3343	Unid 10-mins net: LH5N	CW	(JPL-Sib)
UM10	10-8	1955	Mon	3541	Unid 10-mins net: HDNA (new callsign, new freq)	CW	(JPL-Sib)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
UM10	10-8	1959	Mon	3861	Unid 10-mins net: LH5N //3343 kHz (new // freq)	CW	(JPL-Sib)
UM10	10-8	1959	Mon	3343	Unid 10-mins net: LH5N //3861 kHz	CW	(JPL-Sib)
UM10	13-8	1656	Thu	3541	10-mins net: HDNA (IP - Cont'd - 1656z)	CW	(JPL-Sib)
UM10	13-8	1656	Thu	3343	10-mins net: LH5N //3860 kHz	CW	(JPL-Sib)
UM10	13-8	1702	Thu	3860	10-mins net: LH5N //3343 using Siberia remote tuner:	CW	(JPL-Sib)
UM10	13-8	2235	Thu	6826	10-mins net: ZVVM (IP - Cont'd - 2234z) (Silent 2235z)	CW	(JPL-Sib)
UM10	14-8	1557	Fri	3541	10-mins net: HDNA	CW	(AB-HK)
UM10	14-8	1602	Fri	3343	10-mins net: LH5N //3860 kHz	CW	(AB-HK)
UM10	14-8	1602	Fri	3860	10-mins net: LH5N //3343 kHz	CW	(AB-HK)
UM10	17-8	1731	Mon	3343	10-mins net: LH5N //3860 kHz	CW	(JPL-Sib)
UM10	17-8	1731	Mon	3860	10-mins net: LH5N //3343 kHz	CW	(JPL-Sib)
UM10	18-8	1459	Tue	3343	10-mins station: LH5N	CW	(JPL-Sib)
UM10	19-8	1005	Wed	6826	10-mins net: ZVVM	CW	(JPL-Sib)
UM10	19-8	1755	Wed	3343	10-mins net: LH5N //3860 kHz	CW	(JPL-Sib)
UM10	19-8	1755	Wed	3680	10-mins net: LH5N //3343 kHz	CW	(JPL-Sib)
UM10	23-8	1000	Sun	6826	10-mins net: ZVVM	CW	(JPL-Sib)
UM10	24-8	1132	Mon	6825	10-mins net: LH5N (New freq. for this callsign)	CW	(JPL-Sib)
UM10	26-8	1557	Wed	3860	10-mins net: LH5N //3343 kHz	CW	(JPL-Sib)
UM10	26-8	1557	Wed	3343	10-mins net: KH5N //3860 kHz	CW	(JPL-Sib)
UM10	28-8	1633	Fri	3343	10-mins net: LH5N	CW	(JPL-Sib)
UM10	29-8	0958	Sat	6826	10-mins net: ZVVM	CW	(JPL-Sib)
UM10	29-8	1633	Sat	3343	10-mins net: LH5N	CW	(JPL-Sib)
UM10	29-8	1703	Sat	3343	10-mins net: LH5N	CW	(JPL-Sib)
UM10	29-8	2302	Sat	6826	10-mins net: ZVVM	CW	(JPL-Sib)
UM10	31-8	1457	Mon	3343	10-mins net: LH5N	CW	(JPL-Sib)
UM10	31-8	1458	Mon	3541	10-mins net: HDNA	CW	(JPL-Sib)
V02a	20-8	1958	Thu	7554	YL/SS announcing 5F grps then switches to M08a	AM	(DSch)
V02a	26-8	2300	Wed	8009	YL/SS 5FGs mixing with M08a	LSB	(DSch)
V07	2-8	0500	Sun	14823	845 845 845 000	USB	(Dan)
V07	2-8	0520	Sun	13423	845 845 845 000	USB	(Dan)
V07	16-8	0500	Sun	14823	845 845 845 000	USB	(Dan)
V07	16-8	0520	Sun	13423	845 845 845 000	USB	(Dan)
VC01	6-8	0028	Thu	9132	Chinese Robot	USB	(JPL-Sib)
VC01	22-8	1138	Sat	9132	Chinese Robot	USB	(AM2)
X06	2-8	0858	Sun	16116	Mazielka. Sequence: 134265	USB	(PUK)
X06	2-8	1045	Sun	18660	Mazielka. Sequence: 621543	USB	(PUK)
X06	13-8	0755	Thu	13854	Mazielka. Sequence: 521634	USB	(PUK)
X06	13-8	0814	Thu	16153	Mazielka. Sequence: 153624	USB	(PUK)
X06	13-8	0832	Thu	13854	Mazielka. Sequence: 521634	USB	(PUK)
X06	13-8	1008	Thu	13506	Mazielka. Sequence: 164532	USB	(ES)
X06	13-8	1553	Thu	14442	Mazielka. Sequence: 564213	USB	(Sch)
X06	13-8	1647	Thu	14442	Mazielka. Sequence: 564213	USB	(Sch)
X06	13-8	1805	Thu	15814	Mazielka. Sequence: 261121	USB	(Dan)
X06	13-8	1805	Thu	16314	Mazielka. Sequence: 261121	USB	(Dan)
X06	13-8	1813	Thu	15814	Mazielka. Sequence: 261121	USB	(Dan)
X06	13-8	1813	Thu	16314	Mazielka. Sequence: 261121	USB	(Dan)
X06	18-8	1140	Tue	17454	Mazielka. Sequence: 325614	USB	(AAI)
X06	19-8	0840	Wed	14631	Mazielka. Sequence: 362154	USB	(AB)
X06	22-8	0715	Sat	16103	Mazielka. Sequence: 645321	USB	(AAI)
X06	27-8	1539	Thu	9106	Mazielka. Sequence: 564213	USB	(PUK)
X06b	4-8	1819	Tue	16314	Mazielka. Sequence: 1--6--	USB	(Dan)
X06b	6-8	1820	Thu	16314	Mazielka. Sequence: 1--6--	USB	(Dan)
X06b	17-8	1808	Mon	14378	Mazielka. Sequence: 6--1--	USB	(Sch)
X06b	18-8	1824	Tue	16314	Mazielka. Sequence: 1--6--	USB	(Dan)
XPA	1-8	0600	Sat	10868	813 813 813 000 06953 00001 00000 10140	MFSK-20/10Bd	(AB/HFD)
XPA	1-8	0620	Sat	12168	813 813 813 000 06953 00001 00000 10140	MFSK-20/10Bd	(AB/HFD)
XPA	1-8	0640	Sat	13368	813 813 813 000 06953 00001 00000 10140	MFSK-20/10Bd	(AB/HFD)
XPA	4-8	1730	Tue	12187	173 173 173 000 02225 00001 0000 10140	MFSK-20/10Bd	(AB)
XPA	4-8	1750	Tue	10787	173 173 173 000 02225 00001 0000 10140	MFSK-20/10Bd	(AB/MPJ)
XPA	4-8	1810	Tue	9387	173 173 173 000 02225 00001 0000 10140	MFSK-20/10Bd	(AB)
XPA	5-8	0600	Wed	10868	813 1 07665 00101 96207 ... 72067 61384 61036	MFSK-20/10Bd	(AB)
XPA	5-8	0620	Wed	12168	813 1 07665 00101 96207 ... 72067 61384 61036	MFSK-20/10Bd	(AB)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
XPA	5-8	0640	Wed	13368	813 1 07665 00101 96207 ... 72067 61384 61036	MFSK-20/10Bd	(AB)
XPA	8-8	0600	Sat	10868	813 1 07665 00101 96207 ... 72067 61384 61036	MFSK-20/10Bd	(AB)
XPA	8-8	0620	Sat	12168	813 1 07665 00101 96207 ... 72067 61384 61036	MFSK-20/10Bd	(AB)
XPA	8-8	0640	Sat	13368	813 1 07665 00101 96207 ... 72067 61384 61036	MFSK-20/10Bd	(AB)
XPA	11-8	1730	Tue	12187	06454 00177 34211 ... 20010 31048 12051	MFSK-20/10Bd	(AB/HFD)
XPA	11-8	1750	Tue	10787	06454 00177 34211 ... 20010 31048 12051	MFSK-20/10Bd	(AB/HFD)
XPA	11-8	1810	Tue	9387	06454 00177 34211 ... 20010 31048 12051	MFSK-20/10Bd	(AB/HFD)
XPA	12-8	0600	Wed	10868	813 813 813 000 08748 00001 00000 10140	MFSK-20/10Bd	(AB)
XPA	12-8	0620	Wed	12168	813 813 813 000 08748 00001 00000 10140	MFSK-20/10Bd	(AB)
XPA	12-8	0640	Wed	13368	813 813 813 000 08748 00001 00000 10140	MFSK-20/10Bd	(AB)
XPA	13-8	1730	Thu	12187	173 173 173 000 07583 0000 00000 10110	MFSK-20/10Bd	(AB)
XPA	13-8	1750	Thu	10787	173 173 173 000 07583 0000 00000 10110	MFSK-20/10Bd	(AB/MPJ)
XPA	13-8	1810	Thu	9387	173 173 173 000 07583 0000 00000 10110	MFSK-20/10Bd	(AB)
XPA	15-8	0600	Sat	10868	813 813 813 000 01721 00001 00000 10140	MFSK-20/10Bd	(AB)
XPA	15-8	0620	Sat	12168	813 813 813 000 01721 00001 00000 10140	MFSK-20/10Bd	(AB)
XPA	15-8	0640	Sat	13368	813 813 813 000 01721 00001 00000 10140	MFSK-20/10Bd	(AB)
XPA	18-8	1730	Tue	12187	173 173 173 000 09599 00001 00000 10140	MFSK-20/10Bd	(AB)
XPA	18-8	1750	Tue	10787	173 173 173 000 09599 00001 00000 10140	MFSK-20/10Bd	(AB)
XPA	18-8	1810	Tue	9387	173 173 173 000 09599 00001 00000 10140	MFSK-20/10Bd	(AB)
XPA	19-8	0600	Wed	10868	813 1 05802 00093 46209 ... 87195 83304 14712	MFSK-20/10Bd	(AB)
XPA	19-8	0620	Wed	12168	813 1 05802 00093 46209 ... 87195 83304 14712	MFSK-20/10Bd	(AB)
XPA	19-8	0640	Wed	13368	813 1 05802 00093 46209 ... 87195 83304 14712	MFSK-20/10Bd	(AB)
XPA	20-8	1730	Thu	12187	173 173 173 000 09469 00001 00000 10140	MFSK-20/10Bd	(AB/MPJ)
XPA	20-8	1750	Thu	10787	173 173 173 000 09469 00001 00000 10140	MFSK-20/10Bd	(AB)
XPA	20-8	1810	Thu	9387	173 173 173 000 09469 00001 00000 10140	MFSK-20/10Bd	(AB/MPJ)
XPA	22-8	0600	Sat	10868	813 1 05802 00093 46209 ... 87195 83304 14712	MFSK-20/10Bd	(AB)
XPA	22-8	0620	Sat	12168	813 1 05802 00093 46209 ... 87195 83304 14712	MFSK-20/10Bd	(AB)
XPA	22-8	0640	Sat	13368	813 1 05802 00093 46209 ... 87195 83304 14712	MFSK-20/10Bd	(AB)
XPA	25-8	1750	Tue	10787	173 1 09483 00185 06325 34397 87472 ... 14742 88071 18453 13063 37045	MFSK-20/10Bd	(MPJ)
XPA	25-8	1810	Tue	9387	173 1 09483 00185 06325 34397 87472 ... 14742 88071 18453 13063 37045	MFSK-20/10Bd	(MPJ)
XPA	27-8	1750	Thu	10787	173 1 (Decode failed at message start)	MFSK-20/10Bd	(MPJ)
XPA	29-8	0620	Sat	12168	813 813 813 000 02098 00001 00000 10140	MFSK-20/10Bd	(AB)
XPA2	1-8	1900	Sat	16167	07694 00001 00000 10140	MFSK-16/20Bd	(AB/HFD)
XPA2	1-8	1920	Sat	14663	07694 00001 00000 10140	MFSK-16/20Bd	(AB/HFD)
XPA2	1-8	1940	Sat	13923	07694 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ/HFD)
XPA2	2-8	2000	Sun	14738	09898 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ/HFD)
XPA2	2-8	2020	Sun	13438	09898 00001 00000 10140	MFSK-16/20Bd	(AB/HFD)
XPA2	2-8	2040	Sun	12138	09898 00001 00000 10140	MFSK-16/20Bd	(AB/HFD)
XPA2	4-8	1900	Tue	16314	09927 00001 00000 10140	MFSK-16/20Bd	(AB/Dan/HFD)
XPA2	4-8	1920	Tue	15814	09927 00001 00000 10140	MFSK-16/20Bd	(AB/Dan/HFD)
XPA2	4-8	1940	Tue	14514	09927 00001 00000 10140	MFSK-16/20Bd	(AB/Dan/MPJ/HFD)
XPA2	4-8	2040	Tue	12138	07173 00069 38632 ... 45925 06343 52202	MFSK-16/20Bd	(AB)
XPA2	6-8	1900	Thu	16314	03922 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ/Dan)
XPA2	6-8	1920	Thu	15814	03922 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ/Dan)
XPA2	6-8	1940	Thu	14514	03922 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ/Dan)
XPA2	7-8	0700	Fri	20049	00851 00169 96320 ... 67810 88399 51744	MFSK-16/20Bd	(AB)
XPA2	7-8	0720	Fri	18549	00851 00169 96320 ... 67810 88399 51744	MFSK-16/20Bd	(AB)
XPA2	7-8	0740	Fri	17449	00851 00169 96320 ... 67810 88399 51744	MFSK-16/20Bd	(AB)
XPA2	7-8	1900	Fri	16167	03350 00001 00000 10140	MFSK-16/20Bd	(Dan/MPJ)
XPA2	7-8	1920	Fri	14663	03350 00001 00000 10140	MFSK-16/20Bd	(Dan/MPJ)
XPA2	7-8	1940	Fri	13923	03350 00001 00000 10140	MFSK-16/20Bd	(Dan/MPJ)
XPA2	9-8	2000	Sun	15738	07173 00069 38632 ... 45925 06343 52202	MFSK-16/20bd	(AB/MPJ)
XPA2	9-8	2020	Sun	13438	07173 00069 38632 ... 45925 06343 52202	MFSK-16/20bd	(AB)
XPA2	9-8	2040	Sun	12138	07173 00069 38632 ... 45925 06343 52202	MFSK-16/20bd	(AB)
XPA2	11-8	0700	Tue	20049	00237 00097 22164 ... 54446 66183 36011	MFSK-16/20Bd	(AB)
XPA2	11-8	0720	Tue	18549	00237 00097 22164 ... 54446 66183 36011	MFSK-16/20Bd	(AB)
XPA2	11-8	0740	Tue	17449	00237 00097 22164 ... 54446 66183 36011	MFSK-16/20Bd	(AB)
XPA2	11-8	1900	Tue	16314	01659 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ/Dan)
XPA2	11-8	1920	Tue	15814	01659 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ/Dan)
XPA2	11-8	1940	Tue	14514	01659 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ/Dan)

Code	Date	UTC	Day	Freq	Details	Mode	Ctrb
XPA2	11-8	2000	Tue	14738	06643 00001 00000 10140	MFSK-16/20Bd	(AB)
XPA2	11-8	2020	Tue	13438	06643 00001 00000 10140	MFSK-16/20Bd	(AB)
XPA2	11-8	2040	Tue	12138	06643 00001 00000 10140	MFSK-16/20Bd	(AB)
XPA2	13-8	1900	Thu	16314	04678 00001 00000 10140	MFSK-16/20Bd	(AB/Dan)
XPA2	13-8	1920	Thu	15814	04678 00001 00000 10140	MFSK-16/20Bd	(AB/Dan)
XPA2	13-8	1940	Thu	14514	04678 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ/Dan)
XPA2	14-8	0700	Fri	20049	00237 00097 22164 ... 54446 66183 36011	MFSK-16/20Bd	(AB)
XPA2	14-8	0720	Fri	18549	00237 00097 22164 ... 54446 66183 36011	MFSK-16/20Bd	(AB)
XPA2	14-8	0740	Fri	17449	00237 00097 22164 ... 54446 66183 36011	MFSK-16/20Bd	(AB)
XPA2	14-8	1900	Fri	16167	01223 00059 15063 ... 96953 62962 04032	MFSK-16/20Bd	(AB)
XPA2	14-8	1920	Fri	14663	01223 00059 15063 ... 96953 62962 04032	MFSK-16/20Bd	(AB)
XPA2	14-8	1940	Fri	13923	01223 00059 15063 ... 96953 62962 04032	MFSK-16/20Bd	(AB)
XPA2	16-8	2000	Sun	14738	08631 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ)
XPA2	16-8	2020	Sun	13438	08631 00001 00000 10140	MFSK-16/20Bd	(AB)
XPA2	16-8	2040	Sun	12138	08631 00001 00000 10140	MFSK-16/20Bd	(AB)
XPA2	18-8	1900	Tue	16314	08548 00107 31072 ... 59931 68997 42735	MFSK-16/20Bd	(AB/MPJ)
XPA2	18-8	1900	Tue	16314	08548 00107 31072 ... 59931 68997 42735	MFSK-16/20Bd	(MPJ/Dan)
XPA2	18-8	1920	Tue	15814	08548 00107 31072 ... 59931 68997 42735	MFSK-16/20Bd	(MPJ/Dan)
XPA2	18-8	1920	Tue	15814	08548 00107 31072 ... 59931 68997 42735	MFSK-16/20Bd	(AB/MPJ)
XPA2	18-8	1940	Tue	14514	08548 00107 31072 ... 59931 68997 42735	MFSK-16/20Bd	(MPJ/Dan)
XPA2	18-8	1940	Tue	14514	08548 00107 31072 ... 59931 68997 42735	MFSK-16/20Bd	(AB/MPJ)
XPA2	18-8	2000	Tue	14738	03961 00109 17301 87011 73660 ... 71519 93403 55213 09298 63114	MFSK-16/20Bd	(MPJ)
XPA2	21-8	0700	Fri	20049	06329 00001 00000 00130	MFSK-16/20Bd	(AB)
XPA2	21-8	0720	Fri	18549	06329 00001 00000 00130	MFSK-16/20Bd	(AB)
XPA2	21-8	0740	Fri	17449	06329 00001 00000 00130	MFSK-16/20Bd	(AB)
XPA2	21-8	1900	Fri	16167	06094 00001 00000 10140	MFSK-16/20Bd	(MPJ)
XPA2	21-8	1900	Fri	14663	06094 00001 00000 10140	MFSK-16/20Bd	(MPJ)
XPA2	21-8	1900	Fri	13923	06094 00001 00000 10140	MFSK-16/20Bd	(MPJ)
XPA2	22-8	1900	Sat	16167	03619 00001 00000 10140	MFSK-16/20Bd	(MPJ)
XPA2	22-8	1920	Sat	14663	03619 00001 00000 10140	MFSK-16/20Bd	(MPJ)
XPA2	22-8	1940	Sat	13923	03619 00001 00000 10140	MFSK-16/20Bd	(MPJ)
XPA2	23-8	2000	Sun	14738	Garbled	MFSK-16/20Bd	(AB)
XPA2	23-8	2020	Sun	13438	Garbled	MFSK-16/20Bd	(AB)
XPA2	23-8	2040	Sun	12138	Garbled	MFSK-16/20Bd	(AB)
XPA2	25-8	1900	Tue	16314	03732 00001 00000 10140	MFSK-16/20Bd	(MPJ)
XPA2	25-8	1940	Tue	14514	03732 00001 00000 10140	MFSK-16/20Bd	(MPJ)
XPA2	27-8	1900	Thu	16314	02980 00001 00000 10140	MFSK-16/20Bd	(MPJ)
XPA2	28-8	0720	Fri	17449	09854 00001 00000 00140	MFSK-16/20Bd	(AB)
XPA2	28-8	0720	Fri	18549	09854 00001 00000 00140	MFSK-16/20Bd	(AB)
XPA2	30-8	2000	Sun	14738	03388 00001 00000 10140	MFSK-16/20Bd	(MPJ)

CONTRIBUTORS

AAI	Antonio Anselmi, Italy	JPL-HK	JPL via remote rx Hong Kong
AB	Ary Boender, Netherlands	JPL-Sib	JPL via remote rx Siberia
AB-D	Ary Boender via remote rx Germany	Lan	Landolpho
AB-FNL	Ary Boender via remote rx Finland	MCO	Mike Chace-Ortiz, PA, USA
AB-HK	Ary Boender via remote rx Hong Kong	MPJ	Jim, SW England
AM3	Alaska Mike, Alaska, USA	MPJ-NL	Jim via remote rx Netherlands
Dan	Daniel, Argentina	MUK	Mikesndbs, UK
DJPr	DJpeter via Radioscanner/Priyom	Pat	Pat, France
DK8OK	DK8OK Nils Schiffhaur, D	PPA	Peter Poelstra, Netherlands
DSch	Don Schimmel, USA	Priyom	Priyom.org
ES	Edward Smith	Sch	Schorschi, Germany
HFD	Hans-Friedrich Dumrese, Germany	Tom	Tom, Lincs, UK
HS	Hugh Stegman, USA	WP3	Wolfgang Palmberger
JPL	JPL, Ontario, Canada		

All information in this newsletter was submitted by independent radio monitors or has been obtained from public available sources and public sites on the web. Wherever data was obtained via the web or elsewhere, references and/or links to these sources have been noted.

Google Earth images: Copyright © Google

Portions of this newsletter may be used in electronic or printed hobby bulletins without prior approval so long as "Numbers & Oddities" is credited as the source. This newsletter may NOT be utilized, partly or wholly, in any other COMMERCIAL media format without the written permission of the Editor. Any breach of this may result in action under international copyright legislation.

Relevant mailing lists and websites:

NUMBERS & ODDITIES <http://www.numbersoddities.nl>

SPY NUMBERS ONLINE DATABASE <http://www.spynumbers.com/numbersDB>

UDXF - UTILITY DXERS FORUM <http://www.udxf.nl>

HF UNDERGROUND <http://www.hfunderground.com/board/>

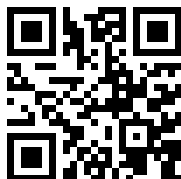
PRIYOM <http://priyom.org/>

To become an UDXF member go to <http://groups.yahoo.com/group/udxf/> and follow the instructions.

To become a Spooks member go to <http://mailman.qth.net/mailman/listinfo/spooks> fill in the form and follow the instructions that will be mailed to you.

878 27364 92836 89428 61288 14982 34498 32164 31276 81
 986 48932 70987 32123 49817 26346 81287 65491 87364 81
 721 75654 55656 12737 72727 72727 91918 63473 67867 76
 423 87629 37677 32612 53498 71296 28756 18276 98716 87
 7269 76329 74698 76857 98670 27601 56701 57601 73648 18
 591 87364 87265 96710 27630 12673 84769 28743 98127 56
 8 63298 75698 27465 87326 49876 28376 81273 98615 81
 67 87432 74328 78674 29867 32867 67867 86786 43266 432
 57 68768 68763 34234 34238 68768 62342 48273 48768 238
 936 98432 32432 86743 43286 43286 43286 43286 43286 432
 743 86743 86743 39867 32867 86743 43286 43286 43243 86
 741 86743 86743 86743 86743 86743 86743 86743 86743 86
 983 98798 98754 98754 98754 98754 29867 67543 67986 86
 876 87698 69876 87698 69876 87612 12341 34867 86798 652
 867 43298 65656 54756 56123 32143 14321 32143 14321 321
 86 82787 58765 76587 58765 76587 58765 76587 58756 765
 86474 86474 86474 86474 86474 86474 86474 86474 86474

N&O



UDXF

